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Overview of neoVI PLASMA

Intrepid Control Systems has brought mobile technology into the world of vehicle testing with neoVI PLASMA!

What Is It?

neoVI PLASMA (Figure 1) is a wireless capable device for testing vehicle data bus networks. This device layout link can help you locate some of its main features.

neoVI PLASMA has WIFI and 3G wireless technologies; plus GPS tracking too.

Up to 3 VNET modules interact with all types of vehicle networks including CAN, LIN, K-Line, MOST, and FlexRay, among others. A FIRE VNET, based upon Intrepid's proven neoVI **FIRE** hardware, is included to start with.

A touch screen interface with an Android operating system lets you quickly see and control operations. Many buttons and LEDs are also included.

As you can see, the neoVI PLASMA has a LOT going on, but this documentation will try to help you get the most from it. A more detailed product overview can be downloaded by clicking here (pdf).

How Do I Use It?

The answer to that really depends upon what your needs are at the time. neoVI PLASMA has the flexibility to be used in a couple of ways:

Wireless Mode (PC from afar)
A computer using the Wireless NeoVI website can find and connect to neoVI PLASMAs that are in remote locations.

PC Mode with Vehicle Spy (PC direct connect)
A computer running Vehicle Spy software can connect directly to a neoVI PLASMA.

Figure 1: The neoVI PLASMA can be used in a couple of ways.

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Device Layout & Features

neoVI PLASMA has tons of features to support its unique modes of operation. Figures 1 and 2 show where some of these features are located. Table 1 below has additional details about these features.

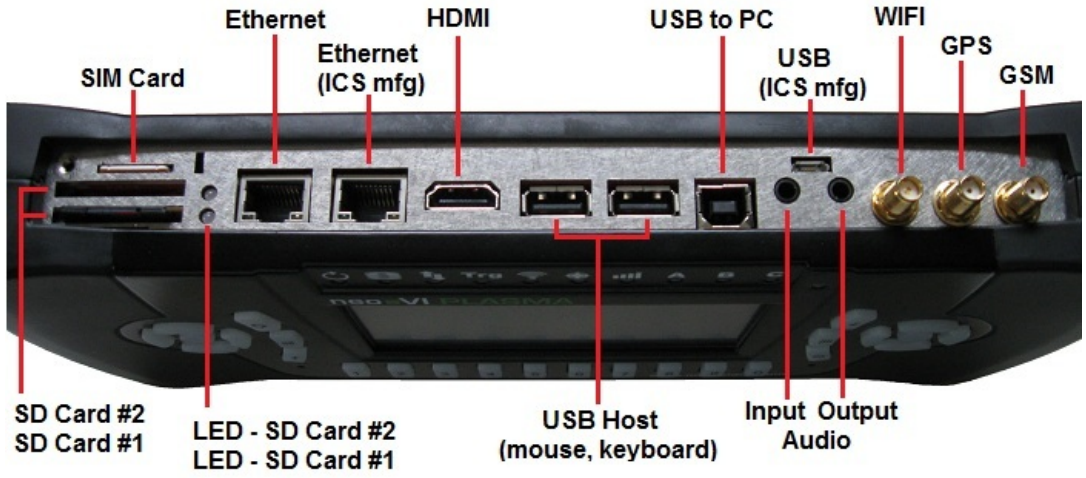

Figure 1: Features on the top of neoVI PLASMA.

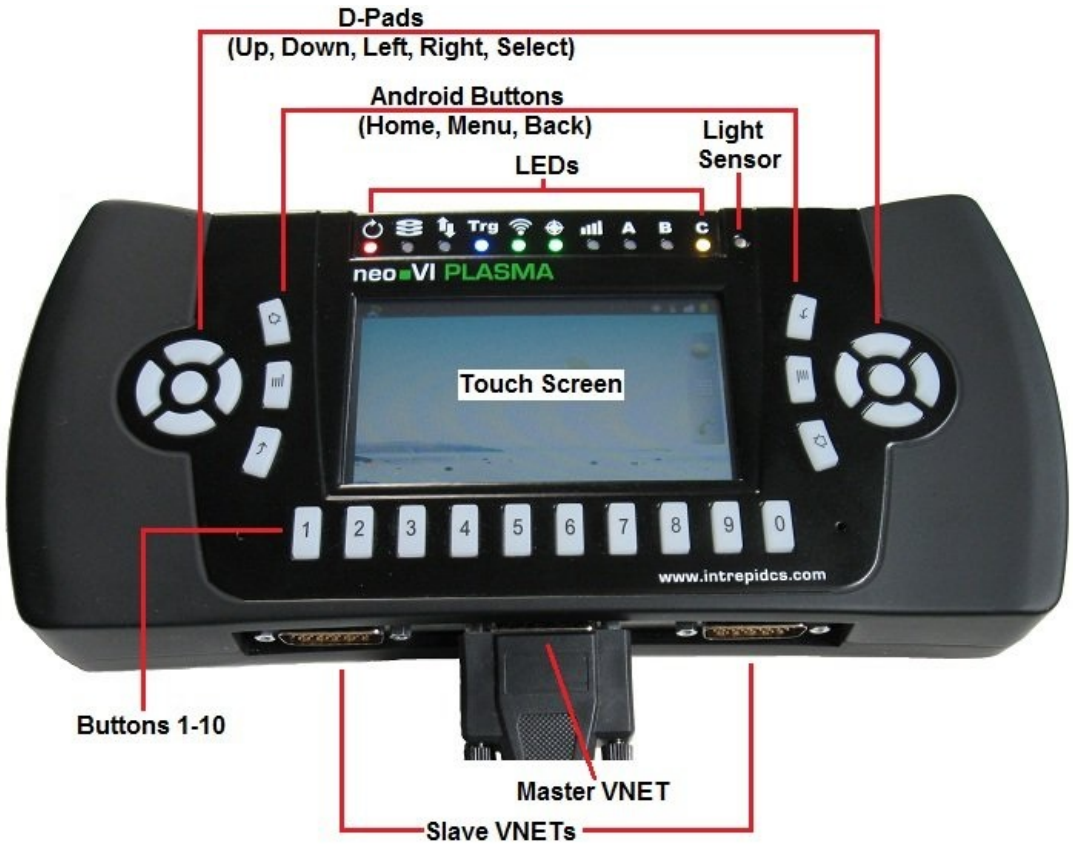

Figure 2: Features on the front and bottom of neoVI PLASMA.

Table 1: neoVI PLASMA Feature Descriptions

Top Side	Description
SIM Card	Slot for a small card that identifies the device on a cellular network. Avoid touching the metal contacts on the card. To insert the SIM card (while looking at the front of Plasma), point its diagonal notch downwards to your left with its gold contacts facing at you. You should feel slight resistance from a spring then hear or feel a small click

	if done properly.
SD Cards	Two standard size slots for SD cards that can be up to 128 GB each for logging data. Avoid touching the metal contacts on the card. To insert an SD card (while looking at the front of Plasma), point its diagonal notch downwards to your left and its gold contacts facing away from you. You should feel slight resistance from a spring then hear or feel a small click if done properly.
SD Card LEDs	Two LEDs that indicate the current status of each SD card.
Ethernet	Outboard port can connect to an Ethernet network or an external 3G modem.
Ethernet (ICS mfg)	Inboard port is for ICS manufacturing and debugging purposes.
HDMI	Connection for an external display, like a monitor or projector.
USB Host	Two USB host ports (standard A plug) for external controls, like a mouse or keyboard.
USB to PC	USB port (standard B plug) for connecting to a computer USB port.
USB (ICS MFG)	Smallest USB port (micro B plug) is for ICS manufacturing and debugging purposes.
Audio Input	Connector jack input for an amplified microphone.
Audio Output	Connector jack output for a small speaker or headphones.
WIFI	WIFI antenna connection for the small mast antenna provided.
GPS	GPS antenna connection for the wire labeled "GPS" on the 2 wire puck antenna provided.
GSM	3G cellular antenna connection for the wire labeled "GSM" on the 2 wire puck antenna provided.
Front Side	**Description**
D-Pad	Backlit 5 button control pad with up, down, left, right, and select buttons. D-Pads on the left and right sides do the same thing.
Android Buttons	Backlit standard Android buttons for Home, Menu, and Back. Button groups on the left and right sides do the same thing.

LEDs	Lights indicate the status of various features.
Light Sensor	Senses how bright or dark the local area is. Read analog value in Vehicle Spy Expression Builder: Physical IO/General neoVI Hardware/Light Sensor Bright = 0 and Dark = 255
Touch Screen	A touch sensitive screen for viewing and controlling information.
Buttons 1-10	Backlit buttons that can be customized for various use.
Bottom Side	**Description**
Master VNET	This connects to DC power and vehicle data bus networks. The master VNET is required to be the FIRE VNET that ships with neoVI PLASMA.
Slave VNETs	Two slave VNETs can be additional FIRE VNETs or other VNETs like AnalogIN, MOST, MOST50, or FlexRay.
Inside	**Description**
Internal Features	A programmable beeper and a temperature sensor.

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Touch Screen

neoVI PLASMA has a touch sensitive screen that uses an Android operating system like many of today's smartphones. Along the top are status bar icons to show new and ongoing events. The home screen (Figure 1) shows onboard applications like WirelessNeoVI.

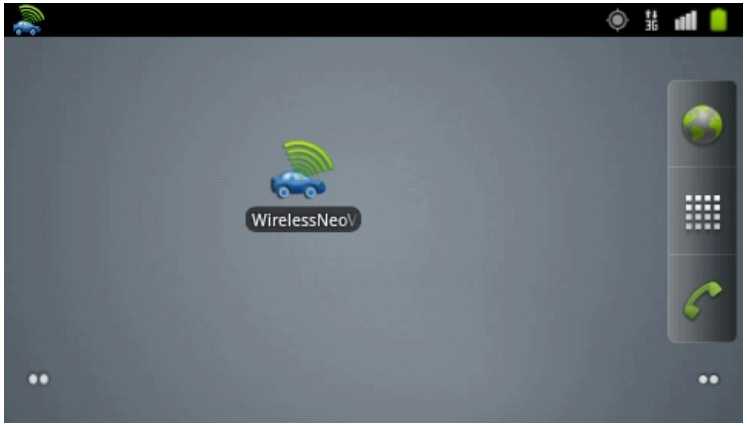

Figure 1: The neoVI PLASMA home screen with status bar indicating a successful start up.

How Do I Use the Touch Screen?

Use these touch motions to perform different tasks:

- **Tap** - to make a menu selection or open an application
- **Press & Hold** - to grab an object that you want to move or open its option menu
- **Drag** - to move an object or to slowly scroll through a list
- **Flick** - to quickly scroll through a list (touch the screen again to stop scrolling)
- **Double Tap** - to zoom in/out on a web page or picture

Status Bar

Along the top of the screen is a status bar that shows new and ongoing events. The events are indicated with short text or small animated icons. The status bar can be flicked downwards to expose more details and upwards again to hide them.

Successful Start Up of Wireless

A few moments after neoVI PLASMA boots up, the touch screen status bar should show:

WirelessNeoVI service is enabled and server is online.
GPS lock established (if enabled, connected, and available)
Wireless link established (WIFI/3G if enabled, connected, and available)
Full battery level (due to external DC power through VNET)

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Status Bar Icons

Along the top of the neoVI PLASMA touch screen are icons to indicate new or ongoing events. Table 1 lists many of these icons and what they mean.

Table 1: neoVI PLASMA Status Bar Icons

Icon	Description
	3G network: alternating arrows means data transferring
	Battery status: full (VNET connected to DC power)
	GPS: enabled and locked in
	GPS: enabled, but not locked in (blinking circle means trying to lock in)
	Cellular signal strength: full signal
	Cellular signal strength: some signal
	Cellular signal strength: no signal
	SIM card not detected
	Sound is muted
	WIFI signal strength: full signal
	WIFI signal strength: some signal
	WIFI signal strength: no signal
	WirelessNeoVI: service is enabled and server is online
	WirelessNeoVI: service is disabled or server is offline

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Buttons

neoVI PLASMA has many buttons located across the device that are explained here further.

There is NOT a power on/off button. neoVI PLASMA is designed to be "always on" until the VNET power connection is removed. Power management features are available to minimize power consumption. neoVI PLASMA entering sleep mode can be identified by all the front facing LEDs turning yellow. Once sleep mode is entered, the LEDs will turn off.

D-Pad Buttons

D-Pads are the round control areas on the left and right sides with 5 backlit buttons for up, down, left, right, and select. Both sides perform the same actions. The buttons can be used along with the touch screen to highlight items and make selections.

Home | Menu | Back Buttons

These 3 backlit buttons on the left and right sides work the same as those found on many of today's Android smartphones:

- Home - jumps to the main home screen from anywhere
- Menu - shows the menu options available
- Back - returns to the previous screen or menu

Custom Buttons 1-10

The custom buttons can be scripted to do different tasks like capture a buffer, transmit a message, or start a function block.

Button Monitoring in Vehicle Spy (for advanced users)

All buttons can be monitored using a Vehicle Spy CoreMini script.

One way to let a button control script logic is to follow these steps:

1. Use a function block script command like "If", "Jump If", or "Wait Until".

2. In VSpy Expression Builder, Physical IO, Switches:

   neo0-sw#-0-index(0) = Value

   Value is 0 (off) or 1 (on).

   # is the **VSpy #** to monitor in Table 1 below.

3. Run the function block script as CoreMini in neoVI PLASMA.

Table 1: Vehicle Spy Button Mapping for neoVI PLASMA

Builder Name	VSpy #	neoVI PLASMA Button	Builder Name	VSpy #	neoVI PLASMA Button
Switch 1	0	Button #1	Switch 13	12	Left Keypad DOWN button
Switch 2	1	Button #2	Switch 14	13	Left Keypad RIGHT button
Switch 3	2	Button #3	Switch 15	14	Left Keypad UP button
Switch 4	3	Button #4	Switch 16	15	Left/Right Android BACK buttons
Switch 5	4	Button #5	Switch 17	16	Left/Right Android MENU buttons
Switch 6	5	Button #6	Switch 18	17	Left/Right Android HOME buttons
Switch 7	6	Button #7	Switch 19	18	Right Keypad UP button
Switch 8	7	Button #8	Switch 20	19	Right Keypad RIGHT button
Switch 9	8	Button #9	Switch 21	20	Right Keypad DOWN button
Switch 10	9	Button #10	Switch 22	21	Right Keypad LEFT button
Switch 11	10	Left Keypad CENTER button	Switch 23	22	Right Keypad CENTER button

Switch 12	11	Left Keypad LEFT button	-	-	-

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LEDs

As the device layout shows, the neoVI PLASMA has many LEDs. There are 2 top facing LEDs for the SD cards and 10 front facing LEDs (Figure 1) that indicate device conditions as described in Table 1.

Figure 1: These LEDs indicate the status of some neoVI PLASMA features.

Table 1: neoVI PLASMA LED Pattern Defaults

LED	Pattern	Description
SD Card LEDs (on top side)	Off	SD card removed.
	Solid Green	SD card inserted.
	Solid Red	SD card is logging data.
	Blink Red	Core firmware is being updated.
All LEDs Together	Solid Yellow	neoVI PLASMA is going to sleep.
	Solid Red	VNET firmware is being updated. OR Internal communication fault between HID and VNET.
LED #1 (red) + LED #2 (green) Together	Blink Green alone	Powered, but not doing anything.
	Blink Red alone	CoreMini is running.
	Alternate Red/Green	Online with Vehicle Spy.
	Blink Red Green Blinks Slowly	Logging pre-trigger data.
	Blink Red Green Blinks Quickly	Logging post-trigger data.
	Blink Red 1x	

	Blink Red 1x Blink Green 3x	VNET in bootloader mode.
	Both Solid Yellow	Waiting to sleep after PC USB is disconnected.
LED #3	Blink White	Data uploading to Wireless NeoVI server before going to sleep.
LED #4	Off	GPS signal not locked in.
	Solid Blue	GPS signal locked in.
LED #5	Off	Modem's PWRMON signal indicates modem is off.
	Solid Green	Modem's PWRMON signal indicates modem is on.
LED #6	Solid Green	Wireless NeoVI license is valid and not expired.
	Solid Blue	Wireless NeoVI license is valid, but expired.
	Solid Red	Wireless NeoVI license is invalid.
LED #7 LED #8	Unused	
LED #9	Off	Modem driver is idle or off.
	Green	Modem driver onoff signal is being pulsed to turn modem on.
	Yellow	Modem driver is waiting for PWRMON or CTS to reach correct state.
	Purple	Modem driver 10 s delay. (required by modem's software user manual)
	Blue	Modem driver onoff signal is being pulsed to turn modem off or is sending AT commands for sleep.
LED #10	Solid Yellow	Stays on 5 s every time Linux sends an internal communication update to HID.

LED Control, Colors, and Mapping (for advanced users)

All front facing LEDs can be controlled using a Vehicle Spy CoreMini script. All of the LEDs are multicolor, including those used for backlighting the buttons.

One way to control a neoVI PLASMA LED in Vehicle Spy is to follow these steps:

1. Use 2 function block script "Set Value" commands to control the LED color and value.

2. In VSpy Expression Builder, Physical IO, LEDs:

   neo0-ld#-1-index(0) = Color ...where Color is 0 to 7...see below*

   neo0-ld#-0-index(0) = Value ...where Value is 0 (off) or 1 (on)

   [# is the **VSpy #** number to change in Table 2 below]

3. Run the function block script as CoreMini in neoVI PLASMA.

* LED colors can be any of these values:

0 black | 1 red | 2 green | 3 yellow | 4 blue | 5 magenta | 6 cyan | 7 white

Table 2: Vehicle Spy LED Mapping for neoVI PLASMA

Builder Name	VSpy #	neoVI PLASMA LED	Builder Name	VSpy #	neoVI PLASMA LED
1	0	Top row LED #1	n/a	18	Bottom button 5
2	1	Top row LED #2	n/a	19	Bottom button 4
3	2	Top row LED #3	n/a	20	Bottom button 3
4	3	Top row LED #4	n/a	21	Bottom button 2
5	4	Top row LED #5	n/a	22	Bottom button 1
6	5	Top row LED #6	n/a	23	Left Android Back button
7	6	Top row LED #7	n/a	24	Left Android Menu button
8	7	Top row LED #8	n/a	25	Left Android Home button

9	8	Top row LED #9	n/a	26	Right keypad UP button
10	9	Top row LED #10	n/a	27	Right keypad RIGHT button
n/a	10	Right Android Back button	n/a	28	Right keypad DOWN button
n/a	11	Right Android Menu button	n/a	29	Right keypad LEFT button
n/a	12	Right Android Home button	n/a	30	Right keypad CENTER button
n/a	13	Bottom button 0	n/a	31	Left keypad UP button
n/a	14	Bottom button 9	n/a	32	Left keypad RIGHT button
n/a	15	Bottom button 8	n/a	33	Left keypad DOWN button
n/a	16	Bottom button 7	n/a	34	Left keypad LEFT button
n/a	17	Bottom button 6	n/a	35	Left keypad CENTER button

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Internal Features

neoVI PLASMA has some internal features that can be accessed using a Vehicle Spy CoreMini script.

Beeper

A programmable beeper can be accessed at this location in the Vehicle Spy Expression Builder:

- Physical IO, PWM Outputs, PWM Output 1, PWM Frequency (Hz)

Audible sound from the beeper ranges between 1 Hz to 4111 Hz. For example, to sound a simple beep, use a function block script with the following steps:

1. Set Value of PWM Output 1 Frequency = 500
2. Wait For = 0.25 s
3. Set Value of PWM Output 1 Frequency = 0
4. Stop

Temperature Sensor

The internal temperature can be accessed at this location in the Vehicle Spy Expression Builder:

- Physical IO, General neoVI Hardware, Temperature Deg C, Value

For example, an application signal can be set to that value and then the temperature can be tracked using the Wireless NeoVI website Live Data command.

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VNETs

VNETs are hardware modules developed for neoVI PLASMA that support different functionality for different needs. Up to three VNETs are possible as shown in Figure 1.

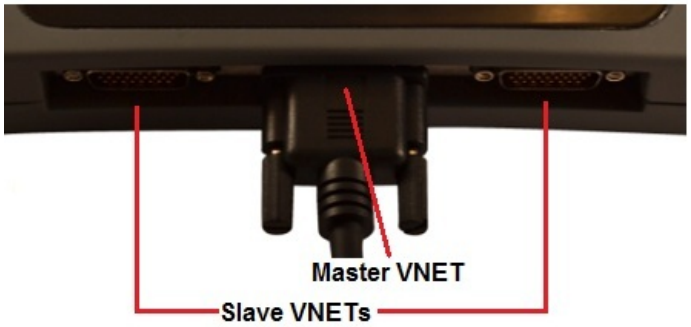

Figure 1: neoVI PLASMA has 3 VNET connections along the bottom.

A central FIRE VNET is required to control the outer two VNETs and also provides the DC power connection to neoVI PLASMA. The outer slots can have any of the VNETs listed in Table 1.

All VNETs are able to run their own scripts for data logging, simulation, or test execution. Scripts run independently of other active VNETs. Although they are independent, they record data with a single time stamp onto the neoVI PLASMA SD cards.

Table 1: neoVI PLASMA VNETs

VNET	Description
FIRE	The master VNET that gives neoVI **FIRE** functionality and controls both slave VNETs. This can also be used in either or both slave VNET slots.
AnalogIN	A slave VNET to measure and record analog inputs.
MOST	A slave VNET to work with the MOST 25 or MOST 50 networks.
MOST50	A slave VNET to work with the MOST 50 network.
FlexRay	A slave VNET to work with the FlexRay network.

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FIRE VNET

One FIRE VNET is included with every neoVI PLASMA to connect to a number of different vehicle networks and control any slave VNETs. The FIRE VNET is based upon Intrepid's proven neoVI **FIRE** hardware. neoVI PLASMA can support 3 VNETs at the same time.

A detailed product overview of the FIRE VNET can be downloaded by clicking here (pdf).

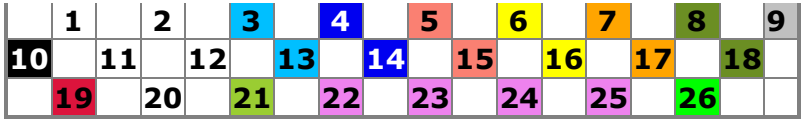
Pinout Diagram

FIRE VNET has a 26 pin male connector with the pinout in Table 1 and layout in Table 2. Note that the FIRE VNET pinout is NOT the same as the neoVI **FIRE** 25 pin connector.

Table 1: FIRE VNET Pinout
(26 pin connector with 3 rows of pins)

Pin	Name	Pin	Name	Pin	Name
1	MISC1	10	GND	19	VBATT
2	MISC3	11	MISC2	20	MISC5
3	TSYNC L	12	MISC4	21	L-LINE
4	HSCAN L	13	TSYNC H	22	LIN1
5	MSCAN L	14	HSCAN H	23	LIN2
6	HSCAN2 L	15	MSCAN H	24	LIN3
7	HSCAN3 L	16	HSCAN2 H	25	LIN4
8	LSFTCAN L	17	HSCAN3 H	26	SWCAN
9	J1850 VPW	18	LSFTCAN H		

Table 2: FIRE VNET Pin Layout
(MALE 26 pin connector with 3 rows of pins)



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Last Update: Monday, January 28, 2013

AnalogIN VNET

The AnalogIN slave VNET measures and records analog inputs. This VNET must be installed in slot 1 for neoVI PLASMA. This VNET must be enabled using the "Slave VNET A" settings in 3G Explorer shown in Figure 1.

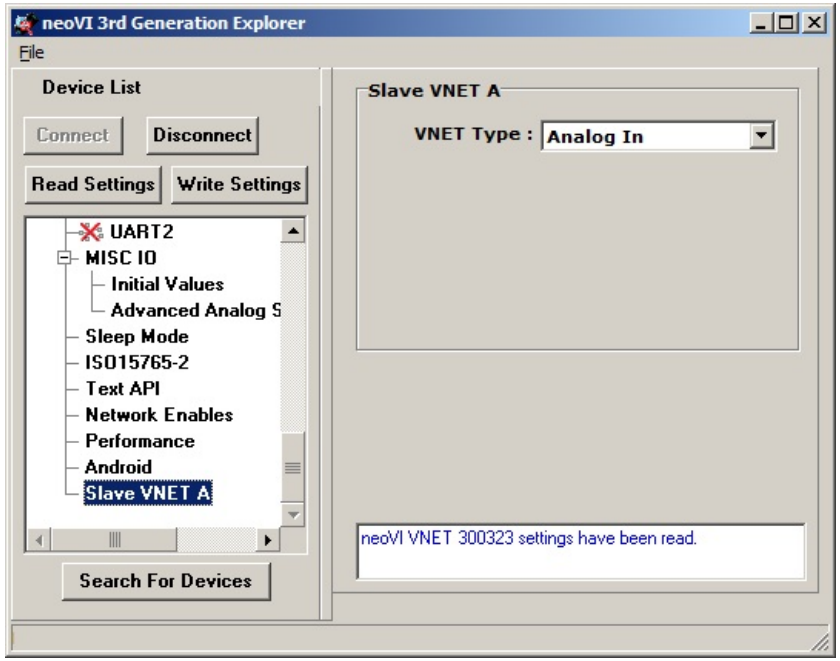

Figure 1: The AnalogIN VNET must be enabled using these 3G Explorer "Slave VNET A" settings.

Pinout Diagram

AnalogIn VNET has a 26 pin male connector with the pinout in Table 1 and layout in Table 2.

Table 1: AnalogIn VNET Pinout
(26 pin connector with 3 rows of pins)

Pin	Name		Pin	Name		Pin	Name

1	ADC_IN 1 +	10	GND	19	VBATT
2	ADC_IN 2 +	11	ADC_IN 1 -	20	ADC_IN 3 +
3	ADC_IN 3 -	12	ADC_IN 2 -	21	ADC_IN 4 -
4	ADC_IN 10 CHA	13	ADC_IN 4 +	22	NA
5	NA	14	ADC_IN 10 CHB	23	NA
6	NA	15	NA	24	NA
7	NA	16	NA	25	ADC_IN 5 -
8	ADC_IN 6 +	17	ADC_IN 5 +	26	ADC_IN 7 -
9	ADC_IN 7 +	18	ADC_IN 6 -		

Table 2: AnalogIn VNET Pin Layout
(MALE 26 pin connector with 3 rows of pins)

	1		2		3		4		5		6		7		8		9	
10		11		12		13		14		15		16		17		18		
	19		20		21		22		23		24		25		26			

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Last Update: Wednesday, December 04, 2013

Wireless Mode

One of the exciting ways to use neoVI PLASMA is in wireless mode* where it can be monitored and controlled remotely by a PC with the Wireless NeoVI website.

How To Get neoVI PLASMA Into Wireless Mode

First, connect a PC to neoVI PLASMA through USB:

1. Configure the firmware, RTC time, and network baud rates with neoVI 3G Explorer.

Next, on neoVI PLASMA by itself:

2. Verify the antennas, SIM card, and SD Card #1 are installed.
3. Connect the FIRE VNET to DC power and vehicle data bus networks.
4. Verify the touch screen shows a successful start up of wireless.

Finally, on a PC by itself:

5. Use Vehicle Spy to generate a VS3ZIP script file with desired power management.
6. Use the Wireless NeoVI website Vehicle List to verify neoVI PLASMA is online.
7. Use the website to send the VS3ZIP script from the PC to neoVI PLASMA.
8. Use the website to control and monitor the neoVI PLASMA.
9. Use the website to transfer archived data collected by neoVI PLASMA to the PC.

*Wireless mode has major advantages, but link speed and data usage should be considered too.

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Last Update: Monday, April 22, 2013

neoVI 3G Explorer

neoVI 3G Explorer configures essential parameters in neoVI PLASMA to ensure that it works correctly during any mode of operation. Parameters include its firmware, real time clock (RTC), and vehicle network baud rates, among others. neoVI 3G Explorer MUST run on a PC connected to the neoVI PLASMA via the USB to PC port.

Open neoVI 3G Explorer on a PC

One way to open neoVI 3G Explorer directly is to click on it in this folder:

- Windows Start menu \ IntrepidCS \ Vehicle Spy 3 \ neoVI 3G Explorer

The other ways to open neoVI 3G Explorer are by opening Vehicle Spy first, then clicking the **Hardware Setup** button at any of these locations:

- Setup \ Hardware
- Spy Networks \ Networks
- Setup Hardware button to the right of the blue play/stop button
- Logon view, Configure Hardware button in lower right corner
- Measurement \ VehicleScape DAQ, Database/Hardware Setup tab, Edit hardware and network settings button
- Tools \ Utilities \ CoreMini Console, neoVI (USB) tab

Use neoVI 3G Explorer to Configure neoVI PLASMA

Firmware
After 3G Explorer is open the VNET will show up in the tree on the left (Figure 1: ①). Clicking the **Connect** button (Figure 1: ②) will connect to the device and read its current settings which will be displayed in the area on the right. The status window (Figure 1: ③) will indicate any issues while connected to the VNET. The firmware versions are displayed on the right (Figure 1: ④) and appear as black text if up-to-date and red text if out of date. If needed, the **Manual Reflash** button will update the firmware.

Network Settings
To adjust a network setting, like baud rate, click on the proper network in the tree and the area on the right will refresh to show the related settings that can be adjusted. Make sure to click the **Write Settings** button (Figure 1: ②) after making changes to push those new settings into neoVI PLASMA. If you make a mistake while changing settings you can click the **Load Defaults** button (Figure 1: ⑤) to reset ALL 3G Explorer settings in neoVI PLASMA back to their defaults.

RTC Time

Click **Read RTC** (Figure 1: 6) to see the current time of the neoVI PLASMA Real Time Clock. Click **Synchronize RTC** re-sync the neoVI PLASMA RTC time to the current PC clock time.

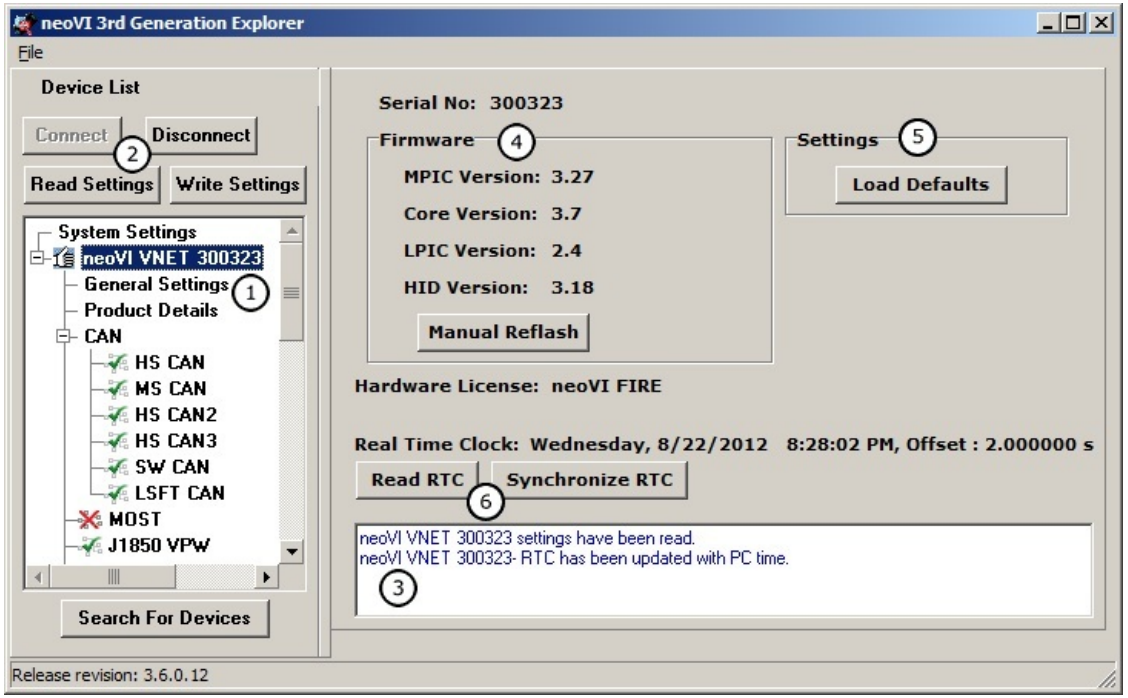

Figure 1: Use neoVI 3G Explorer with PC USB to configure essential parameters in neoVI PLASMA.

Android

If necessary, the neoVI PLASMA's Linux operating system can be updated using 3G Explorer. To flash the device, the USB to PC and USB ICS mfg ports must BOTH be connected at the same time between neoVI PLASMA and the PC for this update to work. After everything is setup, open 3G Explorer on the PC, go to the Android branch, and click the **Update to...** button (Figure 2) to start the update.

The **Send Message Events to Android** checkbox (Figure 2) should remain disabled. This option is for future applications for the neoVI PLASMA.

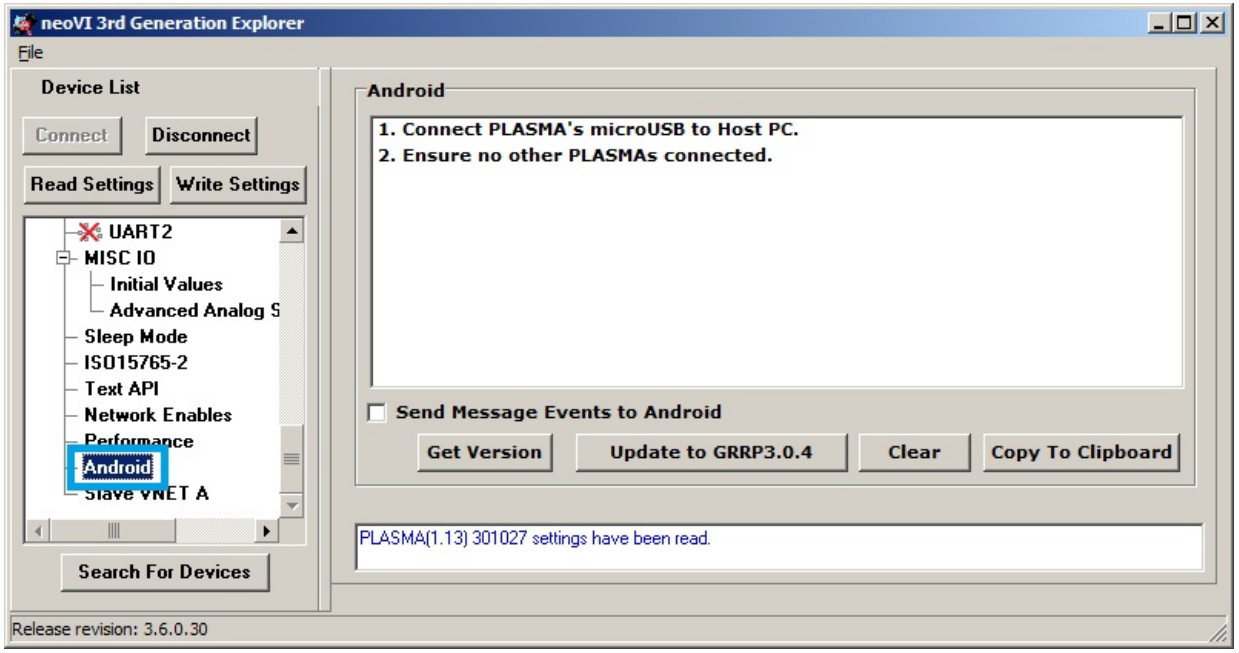

Figure 2: The neoVI PLASMA Linux can be updated using 3G Explorer.

Slave VNET Settings

These settings apply if your neoVI PLASMA has slave VNETs installed (Figure 3).

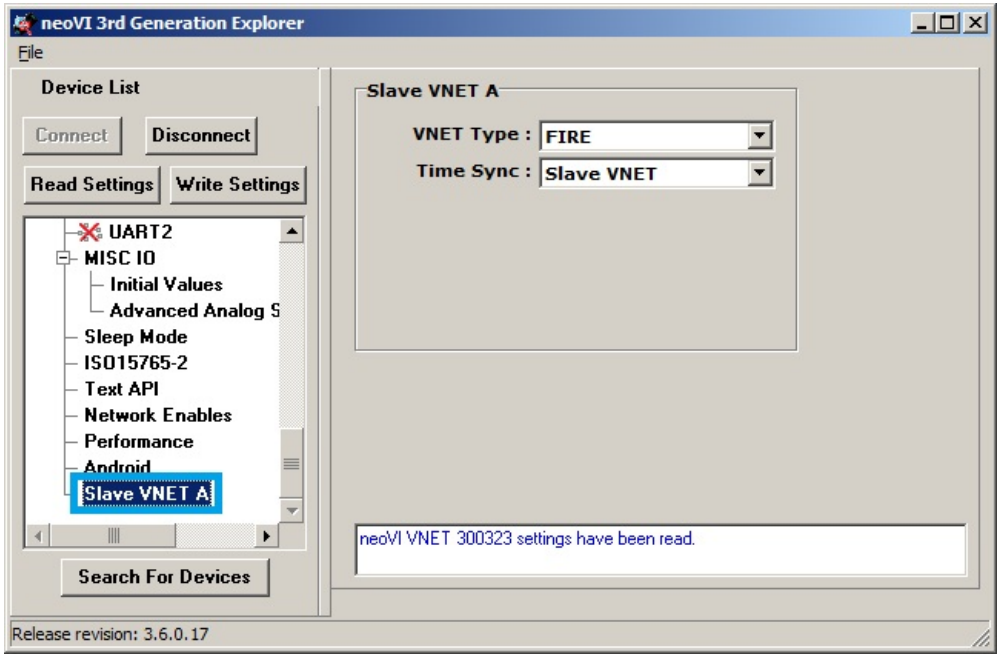

Figure 3: Don't forget slave VNETs have settings too!

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Last Update: Monday, April 22, 2013

Vehicle Spy VehicleScape DAQ

One of the steps to run neoVI PLASMA in wireless mode is to generate a VS3ZIP script file for it. The script file tells neoVI PLASMA how to operate on its own while connected to a vehicle.

How to Make a VS3ZIP Script for neoVI PLASMA

1. Open Vehicle Spy on a PC. (neoVI PLASMA connection is not needed)
2. Open VehicleScape DAQ. (Figure 1)
3. Setup a platform with databases.
4. Select Channels of messages and signals to log.
5. Configure Standalone Logging options.
6. Generate the VS3ZIP script on your PC.

The Wireless NeoVI website can then send the VS3ZIP script from your PC to neoVI PLASMA.

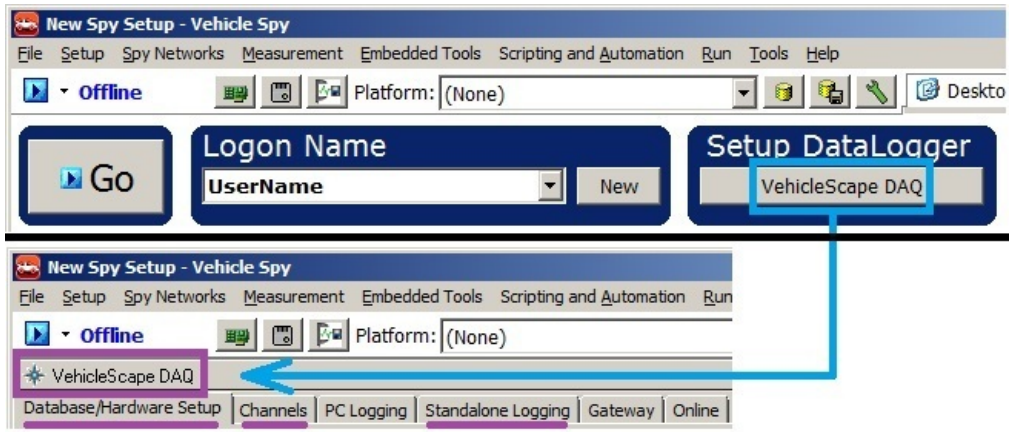

Figure 1: Use Vehicle Spy VehicleScape DAQ on a PC to make a VS3ZIP script for neoVI PLASMA.

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VehicleScape DAQ: Database/Hardware Setup Tab

This is step 3 in making a VS3ZIP script to operate neoVI PLASMA in wireless mode.

The critical role of the Database/Hardware Setup tab (Figure 1) is to setup databases for decoding all vehicle network data. You can also use this tab to change the VS3ZIP script file name and setup neoVI PLASMA hardware.

VS3ZIP Script Name and Hardware Setup

The **Test Name** ① will be the name of your generated VS3ZIP script file. The Hardware Setup section has a button ② that opens neoVI 3G Explorer to edit neoVI PLASMA firmware, baud rates, network enables, and more.

Setup Databases

The Platform Setup section has four parts. All database choices made here will affect the list of signals available on the Channels tab nearby.

The first section is the Current Platform ③. The platform consists of the entire group of databases in the next three sections. VehicleScape is very database dependent, so selecting the correct platform is important! If the platform is not correct or does not exist yet, this section will let you correct it. To change the platforms in the list, click the **Setup Platforms** button to edit them.

The next section is Network databases ④. These databases are applied to all normal mode (non-diagnostic) vehicle network traffic. Clicking the **Load DBC or VSDB files** button will bring up the Network Databases dialog.

The following section is Diagnostic databases ⑤. These databases are applied to all diagnostic vehicle network traffic. Clicking the **Load ODX, MDX/GDX, or A2L files** button will take you to ECUs view where new diagnostic database files can be loaded.

The last Platform Setup section is MEP databases ⑥. Memory Edit Protocol reads and writes ECU memory locations using A2L database files applied to CCP or XCP vehicle network traffic. If any are missing or need updating, the **Load A2L files for CCP/XCP** will display MEP view where A2L Files can be added or updated.

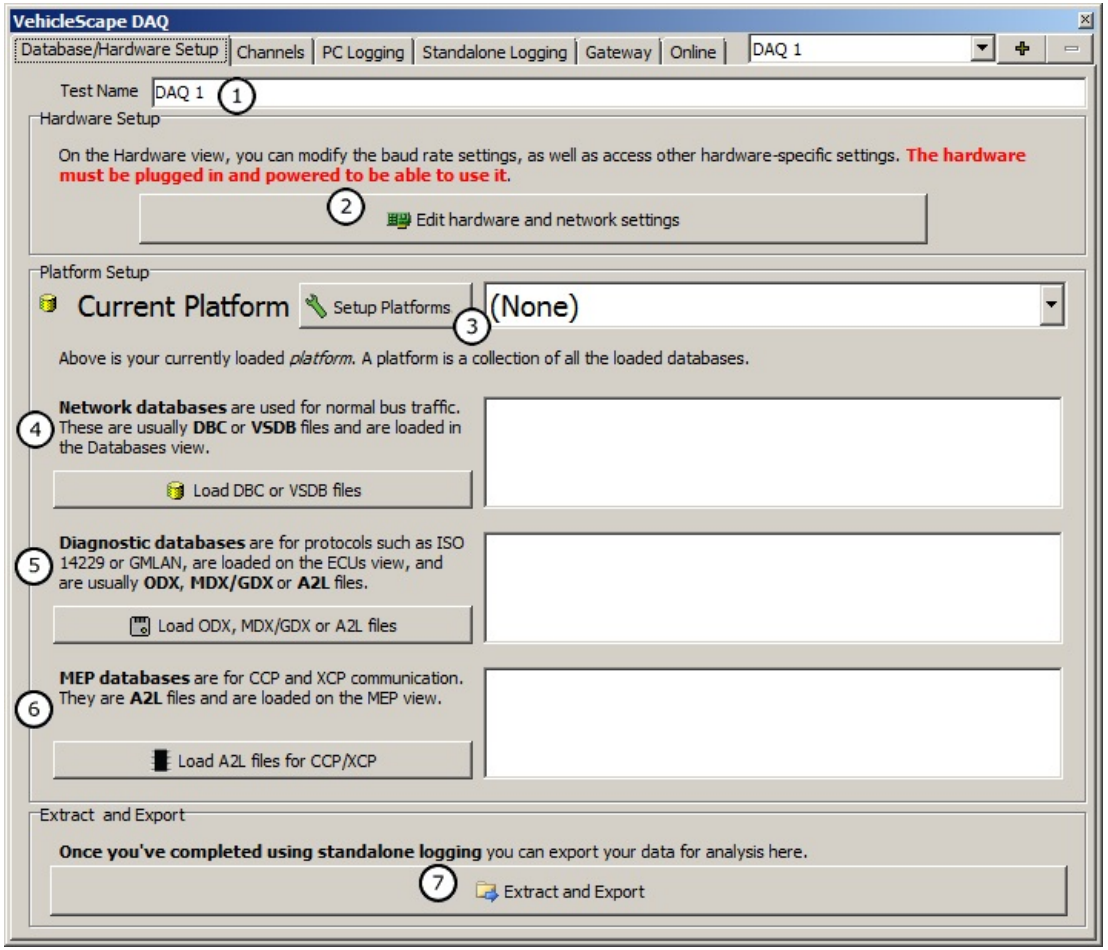
VehicleScape DAQ
Database/Hardware Setup
Channels
PC Logging
Standalone Logging
Gateway
Online
DAQ 1
Test Name
DAQ 1
1
Hardware Setup
On the Hardware view, you can modify the baud rate settings, as well as access other hardware-specific settings. The hardware must be plugged in and powered to be able to use it.
2
Edit hardware and network settings
Platform Setup
Current Platform
Setup Platforms
3
(None)
Above is your currently loaded platform. A platform is a collection of all the loaded databases.
4
Network databases are used for normal bus traffic. These are usually DBC or VSDB files and are loaded in the Databases view.
Load DBC or VSDB files
5
Diagnostic databases are for protocols such as ISO 14229 or GMLAN, are loaded on the ECUs view, and are usually ODX, MDX/GDX or A2L files.
Load ODX, MDX/GDX or A2L files
6
MEP databases are for CCP and XCP communication. They are A2L files and are loaded on the MEP view.
Load A2L files for CCP/XCP
Extract and Export
Once you've completed using standalone logging you can export your data for analysis here.
7
Extract and Export

Figure 1: The VehicleScape DAQ Database/Hardware Setup tab.

Extract and Export

The "Extract and Export" button (7) opens a feature that can use your PC to read an SD card taken from a neoVI PLASMA, extract raw data VSB files from it, then export those VSB files to other decoded file types. For neoVI PLASMA working in wireless mode this extract/export process is usually done with the Wireless NeoVI website without fumbling around with SD cards.

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VehicleScape DAQ: Channels Tab

This is step 4 in making a VS3ZIP script to operate neoVI PLASMA in wireless mode.

The VehicleScape DAQ Channels tab is where signals are selected to log. This tab is split into left and right window panes. The left side displays a list of signals to pick from and the right side allows further adjustments to the signals selected.

Left Side of Channels Tab (Figure 1)

Use the left side of the tab to search for and select signals from a list. The list is a compilation of messages and signals from databases on the nearby Database/Hardware Setup tab and other data like the Messages Editor and Application Signals.

The signal list can be filtered by entering text into the search field or by clicking the diagnostics button and selecting a diagnostic category in the network/ECU tree. Groups of items can be created using press/hold of CTRL or SHIFT keys and left clicking the items. Highlighted signals to be logged can be **Selected** one at a time or **All** at once by clicking the corresponding button below the search field.

The **Paste List** button can speed up signal selection when working with a huge list of signals. First, copy to the clipboard a list of line delimited signal names from any source, like a column in a spreadsheet. Next, click the Paste List button and Vehicle Spy will attempt to select all signals that match the clipboard entries. Specific Problem Logs will indicate any signals that Vehicle Spy could not find a match for.

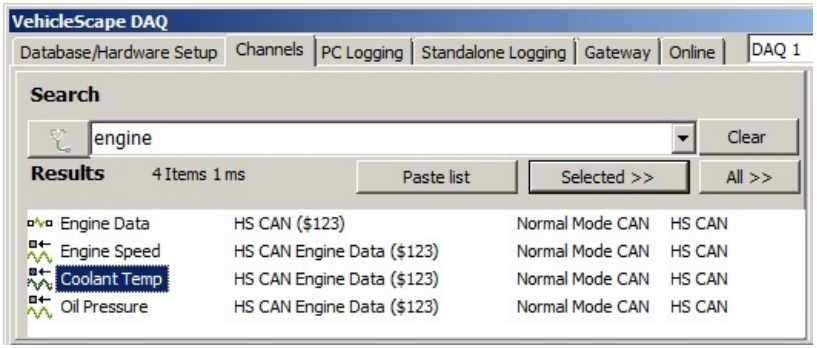

Figure 1: Use the left side of VehicleScape DAQ Channels to find and select signals to log.

Right Side of Channels Tab (Figure 2)

Use the right side of the tab to make adjustments to the signals selected.

Polling Setup

These polling rates determine how fast any one shot diagnostic jobs are repeated. These polling rates do NOT affect MEP A2L file data items because those items use their own MEP DAQ Delay times.

The **Set Export Order** button sets the ordering of signals in CSV and MAT signal export files.

If GMLAN is enabled in Vehicle Spy Tools/Options, then items from GM cal files can be loaded by clicking a **CAL File** button.

Selected Channels For Test

The Selected Channels for Test area in the lower half of Figure 2 displays the signals that were selected to be logged. If the signal is a PID or MEP A2L file data item then its priority (how often it gets requested) can be changed to Fast/Medium/Slow by double clicking on it. At the bottom of this area, use the **Clear** button to clear the entire list or the **Remove** button to remove signals one at a time.

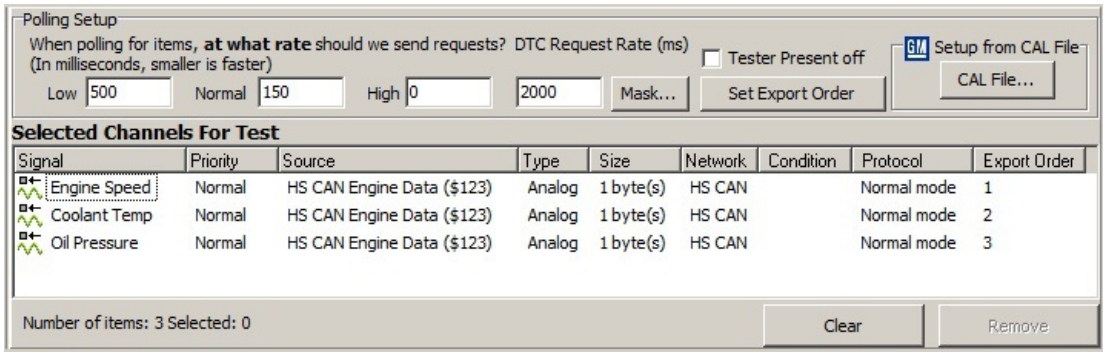
Polling Setup
When polling for items, at what rate should we send requests? DTC Request Rate (ms)
(In milliseconds, smaller is faster)
Low 500 Normal 150 High 0 2000 Mask...
Tester Present off
Set Export Order
GM Setup from CAL File
CAL File...
Selected Channels For Test
Signal Priority Source Type Size Network Condition Protocol Export Order
Engine Speed Normal HS CAN Engine Data ($123) Analog 1 byte(s) HS CAN Normal mode 1
Coolant Temp Normal HS CAN Engine Data ($123) Analog 1 byte(s) HS CAN Normal mode 2
Oil Pressure Normal HS CAN Engine Data ($123) Analog 1 byte(s) HS CAN Normal mode 3
Number of items: 3 Selected: 0
Clear
Remove

Figure 2: Use the right side of VehicleScape DAQ Channels to adjust settings of the selected signals being logged.

Right Click Menu (Figure 3)

The Selected Channels For Test area has an extensive right click menu with selections described below in Table 1.

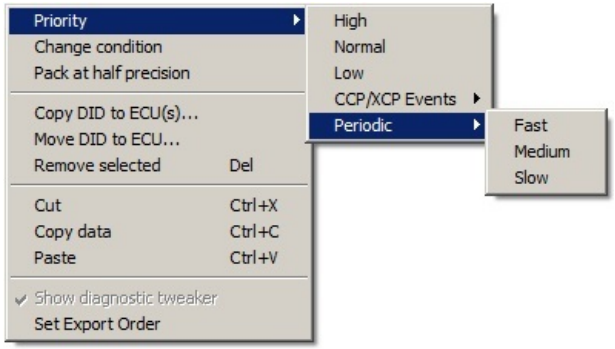

Figure 3: The Selected Channels For Test area has useful right click menu selections.

Table 1: Right Click Menu Selections for Items in Selected Channels for Test

Rt Click Menu Selection	Description
Priority High/Normal/Low	Sets the periodic rate of one shot requests sent for this item. Polling Setup defaults (ms): **High = 0 / Normal = 150 / Low = 500** GMLAN DPID = job $AA/01 GMLAN PID = job $22 GMLAN Memory Data = job $23 ISO 14229 DID = job $22 (only if ISO15765 not needed) ISO 14229 Memory Data = job $23 MEP DAQ Delays (ms): **High = 0 / Normal = 150 / Low = 600** MEP A2L item = MEP DAQ Delay rates
CCP/XCP Events	Allowed only for MEP A2L items. Selects an ECU event schedule defined in an A2L file. This is known as event based DAQ'ing.
	Sets the periodic DPID schedule rate that this item is packed in. Per GMW3110 specification (ms): **Fast = 25 / Medium = 200 / Slow = 1000** GMLAN DPID = job $AA 04/03/02

Periodic Fast/Medium/Slow	GMLAN PID = job $2C + $AA 04/03/02 GMLAN Memory Data = job $2D + $2C + $AA 04/03/02 Per ISO 14229 specification (ms): **"vehicle-manufacturer-specific"** ISO 14229 DID = job $2C + $2A 03/02/01 ISO 14229 Memory Data = job $2C + $2A 03/02/01
Change condition	Allowed only for ISO 14229 and GMLAN items. Selects which Standalone Logging collections must be active for this signal to be requested.
Pack at half precision	If an item Priority = Periodic this packs only the signal's top half most significant bytes into a dynamic DPID. This allows packing more items, but with a sacrifice of precision.
Copy DID to ECU	Copies a DID definition from one "real" ECU to another in the diagnostic database.
Move DID to ECU	Allowed only for ISO 14229 DIDs with its source being a base/virtual/GMRDB ECU with USDT request ID = 0. Use this to copy DIDs from a base/virtual/GMRDB ECU with DID definitions to "real" ECUs that need DID definitions in the diagnostic database. The base/virtual/GMRDB ECU DID list will remain unchanged after using this menu selection.
Remove selected	Cuts selected signals from the list without copying them to the clipboard.
Cut	Cuts selected signals from the list and copies their information to the clipboard.
Copy data	Copies all signal information to the clipboard in a tab delimited format that can be pasted into a spreadsheet application.
Paste	Pastes previously cut signals into the list.
Show diagnostic tweaker	Shows a viewing area on the right side of the Online tab.
Set Export Order	Sets the ordering of signals in CSV and MAT signal export files.

Top of Page

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VehicleScape DAQ: Standalone Logging Tab

This is step 5 in making a VS3ZIP script to operate neoVI PLASMA in wireless mode.

Additional help can be found in the VehicleScape DAQ Standalone Logging application note within the Vehicle Spy help files.

The Standalone Logging tab generates a script that lets ICS hardware collect data on its own while disconnected from a computer.

Standalone Logging Page Layout

The Standalone Logging page has 2 major areas shown in Figure 1 and described in Table 1.

The upper area has Collection setups that change appearance depending upon which method is being used in that collection.

The bottom area contains important sections that do not change appearance because these settings affect ALL collections above.

Table 1: Standalone Logging Setup Areas

Standalone Logging Area	Description
Collections and Methods	Collections define log file creation and they can use different methods to gather data.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

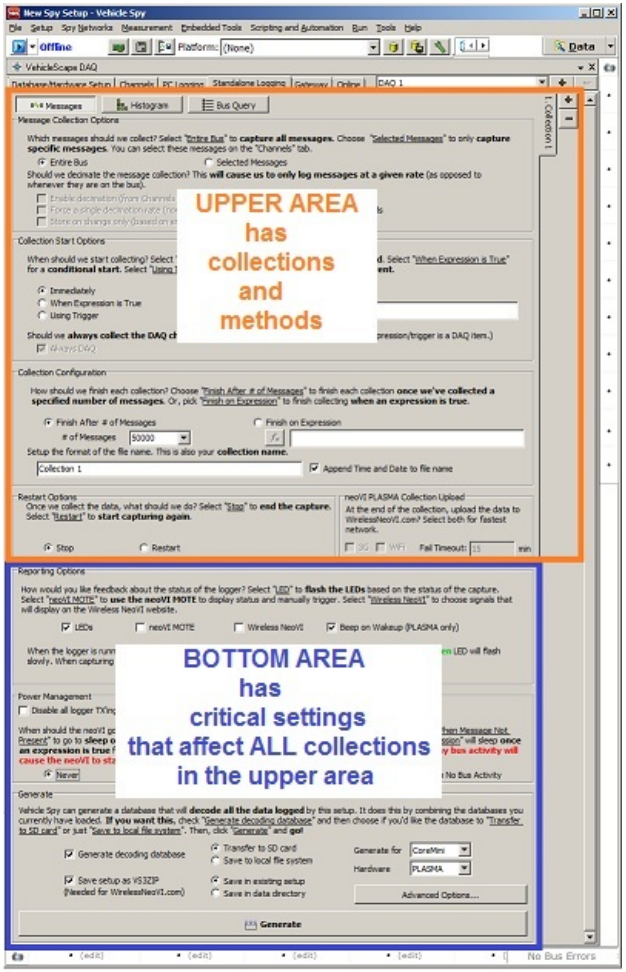

Figure 1: In Vehicle Spy, the VehicleScape DAQ Standalone Logging tab has 2 major areas.

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Standalone Logging Collections and Methods

Collections (Figures 1 and 2)

A Standalone Logging collection defines how, when, and what log files are created. Each collection can use a different method with its own start/stop trigger logic and configuration settings. Each collection can log many files and all of the files from that collection will be created in the same manner.

Collections appear as vertical tabs along the right side of Standalone Logging similar to Figure 1. They can be added and deleted using the +/- buttons nearby. One standalone logger script can have a maximum of 16 unique collections.

The collection name can be changed at the top of each method setup area as shown in Figure 2. Every data file saved by the logger script will have the same root name as the collection it came from.

Figure 1: Collection tabs.

Figure 2: This collection name is shown on the vertical tabs.

Methods (Figure 3)

Each collection can gather messages, a histogram, or a bus query.

- Messages - data over a period of time.
- Histogram - frequency of data points across a value range over a period of time.
- Bus Query - snapshot of data at one point in time.

The following links will take you to detailed help for each Standalone Logging method:

Messages Histogram Bus Query

Figure 3: Standalone Logging can gather messages, histograms, and bus queries.

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Standalone Logging - Messages

In VehicleScape DAQ the Standalone Logging of a Messages collection lets ICS hardware log data files over a period of time. Use the links in Table 1 to see more help for the setup options.

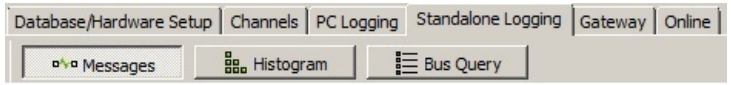

Figure 1: The VehicleScape DAQ Standalone Logging Messages selection.

Table 1: Standalone Logging Messages Setup Sections

Messages Setup Section	Description
Message Collection Options	For this collection, select which messages to log and how to log them.
Collection Start Options	For this collection, select when to start logging data.
Collection Configuration	For this collection, select when to stop logging data.
Restart Options	For this collection, select when to restart logging data.
neoVI PLASMA Collection Upload	For this collection, select when to upload data to a WirelessNeoVI server.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

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Standalone Logging Message Collection Options

In VehicleScape DAQ the Standalone Logging of a Messages collection has specific settings described in Table 1 and shown in Figure 1.

Table 1: Standalone Logging Message Collection Options

Message Collection Option	Description
Entire Bus	In this collection, log all messages from all networks.
Selected Messages	In this collection, only log data selected on the Channels tab.
Enable decimation	In this collection, log selected data at periodic rates defined in the Channels tab Priority column.
Force a single decimation rate	In this collection, log selected normal mode data at a chosen periodic rate, regardless of how fast/slow it appears on the network. Diagnostic mode data rates are unaffected.
Store on change only	In this collection, log selected data only if any data in its carrier message has changed.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

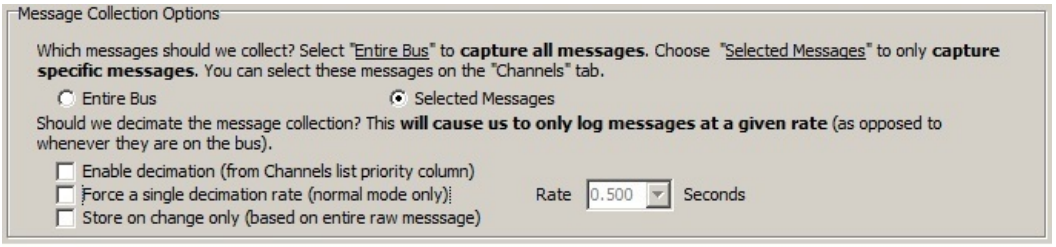
Message Collection Options
Which messages should we collect? Select "Entire Bus" to capture all messages. Choose "Selected Messages" to only capture specific messages. You can select these messages on the "Channels" tab.
Entire Bus
Selected Messages
Should we decimate the message collection? This will cause us to only log messages at a given rate (as opposed to whenever they are on the bus).
Enable decimation (from Channels list priority column)
Force a single decimation rate (normal mode only)
Rate
0.500
Seconds
Store on change only (based on entire raw messsage)

Figure 1: The Standalone Logging Message Collection Options.

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Standalone Logging Collection Start Options

In VehicleScape DAQ the Standalone Logging of a Messages or Bus Query collection has Start Options described in Table 1 and shown in Figure 1.

Table 1: Standalone Logging Collection Start Options

Collection Start Option	Description
Immediately	In this collection, start logging data immediately after power up. This enables a Finish After Messages or Expression.
When Expression is True	In this collection, start logging data after the expression is true. This enables a Finish After Messages or Expression.
Using Trigger	In this collection, start logging data after an expression action. This enables setup of a Pre/Post Collection or One Shot Report.
Trigger when expression is true	In this collection, start logging data after the expression is true for a selected time.
Trigger when expression changes	In this collection, start logging data after the expression changes from its current value.
Trigger when expression increases/decreases	In this collection, start logging data after the expression changes from its current value by some chosen amount.
Manual Trigger	In this collection, start logging data if the neoVI MOTE or other pendant button is pressed.
Always DAQ	In this collection, always request DAQ items even if they are not being logged. Requested DAQ items are diagnostic signals that get polled from ECUs like DTCs, PIDs, ISO 14229 IDs, and MEP A2L file data items. This must be enabled if the Start expression uses any requested DAQ item.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

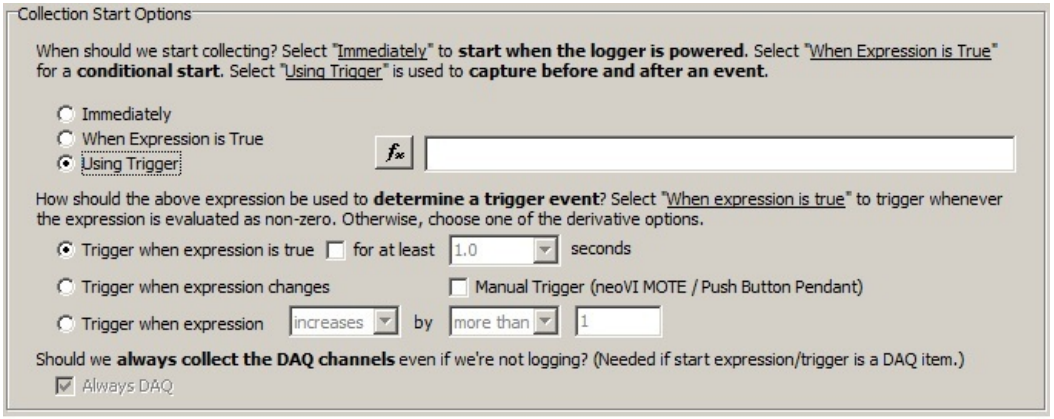
Collection Start Options
When should we start collecting? Select "Immediately" to start when the logger is powered. Select "When Expression is True" for a conditional start. Select "Using Trigger" is used to capture before and after an event.
Immediately
When Expression is True
Using Trigger
How should the above expression be used to determine a trigger event? Select "When expression is true" to trigger whenever the expression is evaluated as non-zero. Otherwise, choose one of the derivative options.
Trigger when expression is true
for at least
1.0
seconds
Trigger when expression changes
Manual Trigger (neoVI MOTE / Push Button Pendant)
Trigger when expression
increases
by
more than
1
Should we always collect the DAQ channels even if we're not logging? (Needed if start expression/trigger is a DAQ item.)
Always DAQ

Figure 1: The Standalone Logging Collection Start Options.

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Standalone Logging Collection Configuration

In VehicleScape DAQ the Standalone Logging of a Messages or Bus Query collection has a Collection Configuration setup that changes appearance based upon what Collection Start Option is selected. Use the links described in Table 1 to see more help for each configuration setup.

Table 1: Standalone Logging Collection Configurations

Collection Configuration	Description
Finish After Messages or Expression	For this collection, stop logging after a chosen number of messages are logged or after an expression is true. This setup is enabled if Collection Start Option = Immediately or When Expression is True.
Pre/Post Collection	For this collection, log data before and after the Collection Start trigger. The capture window can be defined using an expression, a length of time, or a number of messages. This setup is enabled if Collection Start Option = Using Trigger.
One Shot Report	For this collection, log a snapshot of data values after a Collection Start triggered chosen delay time. This setup is enabled if Collection Start Option = Using Trigger.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

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Standalone Logging Collection Configuration - Finish After Messages or Expression

In VehicleScape DAQ the Standalone Logging of a Messages collection has a Collection Configuration setup area that changes appearance based upon what Collection Start Option is selected.

The Collection Configuration in Figure 1 is displayed only if:

Collection Start Option = Immediately or When Expression is True

Table 1 describes each setting in Figure 1 and some other settings that affect all collections.

Table 1: Standalone Logging Collection Configuration - Finish After Messages or Expression Options

Collection Configuration Setting	Description
Finish After # of Messages	For this collection, stop logging data when a chosen number of messages are logged after the Collection Start trigger.
Finish on Expression	For this collection, stop logging after an expression is true.
Collection / Log File Name	The name of this collection and the root name of all log files it creates.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

Collection Configuration
How should we finish each collection? Choose "Finish After # of Messages" to finish each collection once we've collected a specified number of messages. Or, pick "Finish on Expression" to finish collecting when an expression is true.
Finish After # of Messages
# of Messages
50000
Finish on Expression
Setup the format of the file name. This is also your collection name.
Collection 1
Append Time and Date to file name

Figure 1: The Collection Configuration if Collection Start = Immediately or When Expression is True.

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Standalone Logging Collection Configuration - Pre/Post Collection

In VehicleScape DAQ the Standalone Logging of a Messages collection has a Collection Configuration setup area that changes appearance based upon what Collection Start Option is selected.

The Collection Configuration in Figure 1 is displayed if:

Collection Start Option = Using Trigger and Pre/Post Collection is selected.

Table 1 describes each setting in Figure 1 and some other settings that affect all collections.

Table 1: Standalone Logging Collection Configuration - Pre/Post Collection Options

Pre/Post Collection Setting	Description
Pre/Post Collection	For this collection, log data before and after the Collection Start trigger. The capture window can be defined using an expression, a length of time, or a number of messages.
One-shot Report	For this collection, log a snapshot of data values after a Collection Start triggered chosen delay time. Click the link to see further details.
Stop on expression	For this collection, stop logging when the expression is true.
"changing" checkbox	For this collection, stop logging when the expression changes from its current value.
Timeout sec	For this collection, stop logging when the expression is true/changes value OR after a timeout period in seconds. This timeout is disabled if set = 0 and logging will stop based only upon the expression logic.
Card Size	SD card memory size in the ICS hardware that will run the Standalone Logging script.
By time	For this collection, use time to define the pre/post capture window.
Time Before/After Trigger	For this collection, save a log file that starts/stops at the chosen times around the Collection Start trigger.
By number of messages	For this collection, use message count to define the pre/post capture window.

Messages Before/After Trigger	For this collection, save a log file that starts/stops at the chosen message counts around the Collection Start trigger.
Collection / Log File Name	The name of this collection and the root name of all log files it creates.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

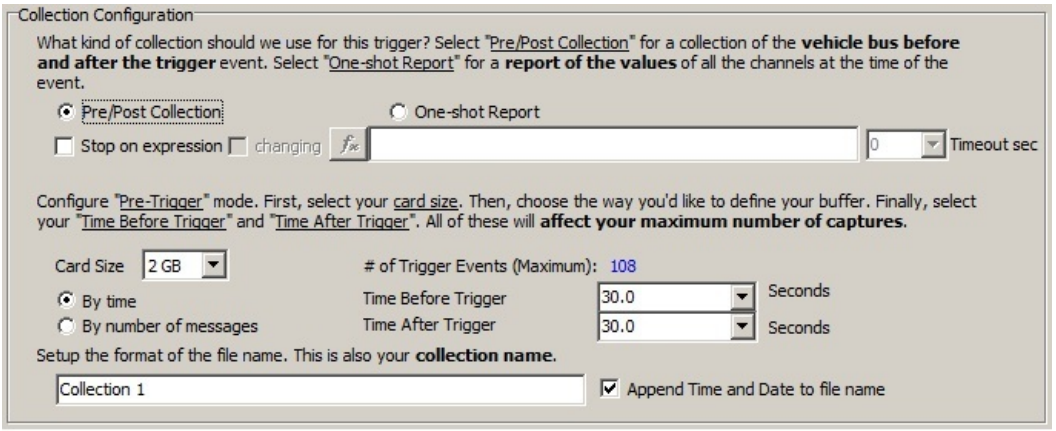
Collection Configuration
What kind of collection should we use for this trigger? Select "Pre/Post Collection" for a collection of the vehicle bus before and after the trigger event. Select "One-shot Report" for a report of the values of all the channels at the time of the event.
Pre/Post Collection
One-shot Report
Stop on expression
changing
0
Timeout sec
Configure "Pre-Trigger" mode. First, select your card size. Then, choose the way you'd like to define your buffer. Finally, select your "Time Before Trigger" and "Time After Trigger". All of these will affect your maximum number of captures.
Card Size
2 GB
# of Trigger Events (Maximum): 108
By time
By number of messages
Time Before Trigger
30.0
Seconds
Time After Trigger
30.0
Seconds
Setup the format of the file name. This is also your collection name.
Collection 1
Append Time and Date to file name

Figure 1: The Collection Configuration if Collection Start = Using Trigger and Pre/Post is selected.

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Standalone Logging Collection Configuration - One Shot Report

In VehicleScape DAQ the Standalone Logging of a Messages or Bus Query collection has a Collection Configuration setup area that changes appearance based upon what Collection Start Option is selected.

The Collection Configuration in Figure 1 is displayed if:

Collection Start Option = Using Trigger and One-shot Report is selected.

Table 1 describes each setting in Figure 1 and some other settings that affect all collections.

Table 1: Standalone Logging Collection Configuration - One Shot Report Setting

One Shot Report Option	Description
Pre/Post Collection	For this collection, log data before and after the Collection Start trigger. The capture window can be defined using an expression, a length of time, or a number of messages. Click the link to see further details.
One-shot Report	For this collection, log a snapshot of data values after the Collection Start trigger then stop logging.
After trigger delay	For this collection, wait for a delay time (in seconds) after the Collection Start trigger then log a snapshot of data values and stop logging. If the trigger delay = 0 then the One Shot Report will occur immediately.
Collection / Log File Name	The name of this collection and the root name of all log files it creates.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

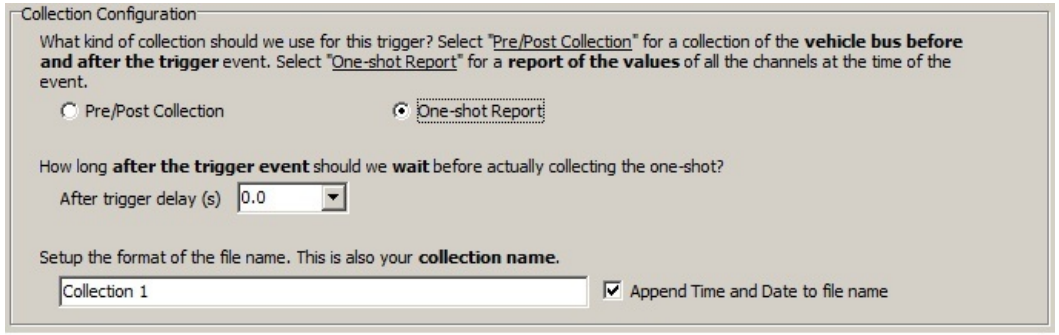
Collection Configuration
What kind of collection should we use for this trigger? Select "Pre/Post Collection" for a collection of the vehicle bus before and after the trigger event. Select "One-shot Report" for a report of the values of all the channels at the time of the event.
Pre/Post Collection
One-shot Report
How long after the trigger event should we wait before actually collecting the one-shot?
After trigger delay (s)
0.0
Setup the format of the file name. This is also your collection name.
Collection 1
Append Time and Date to file name

Figure 1: The Collection Configuration if Collection Start = Using Trigger and One Shot Report is selected.

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Standalone Logging Restart Options

In VehicleScape DAQ the Standalone Logging of a Messages or Bus Query collection has Restart Options that change appearance based upon other collection settings.

Table 1 describes the settings in Figures 1 to 3 and some other settings that affect all collections.

Table 1: Standalone Logging Restart Options

Restart Option	Description
Stop	In this collection, stop logging after the stop conditions are met. If using Pre/Post Collection then stop only after the max number of trigger events have been collected. This setting disappears if a Pre/Post Collection is using a stop expression.
Restart	In this collection, restart logging after the stop conditions are met and wait again for the Collection Start trigger.
Force Restart	In this collection, always restart logging after the stop conditions are met. (ignore the initial Collection Start trigger) This setting is available if Collection Start Option = When Expression is True.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

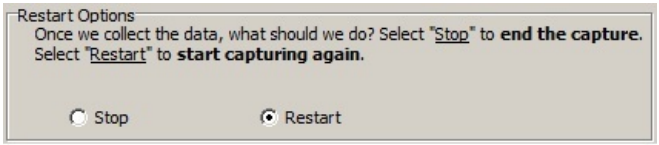
Restart Options
Once we collect the data, what should we do? Select "Stop" to end the capture.
Select "Restart" to start capturing again.
Stop
Restart

Figure 1: The Restart Options if Collection Start = Immediately.

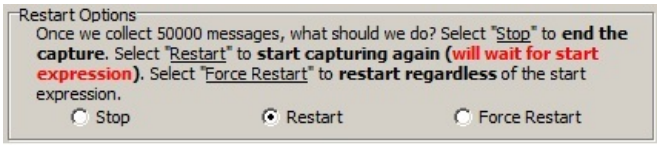
Restart Options
Once we collect 50000 messages, what should we do? Select "Stop" to end the capture. Select "Restart" to start capturing again (will wait for start expression). Select "Force Restart" to restart regardless of the start expression.
Stop
Restart
Force Restart

Figure 2: The Restart Options if Collection Start = When Expression is True.

Restart Options
Once the trigger expressions transitions from true to false, we will "Restart" the trigger and wait for the next event.
Restart

Figure 3: The Restart Options if Collection Configuration = Stop on Expression.

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Standalone Logging neoVI PLASMA Collection Upload

In VehicleScape DAQ the Standalone Logging of a Messages or Bus Query collection has neoVI PLASMA Collection Upload options to take advantage of PLASMA's wireless capabilities.

Table 1 describes the settings in Figure 1 and some other settings that affect all collections.

Table 1: Standalone Logging neoVI PLASMA Collection Upload Settings

PLASMA Collection Upload Setting	Description
3G	Each time this collection stops, automatically upload its log file to a WirelessNeoVI server using the neoVI PLASMA 3G wireless link. (slower than WIFI, but usually more available in the USA)
WIFI	Each time this collection stops, automatically upload its log file to a WirelessNeoVI server using the neoVI PLASMA WIFI link. (faster than 3G, but not as widely available in the USA)
Fail Timeout	Each time this collection stops, keep trying to automatically upload its log file to a WirelessNeoVI server until successful or until the timeout (in minutes) expires. This timer restarts after each PLASMA wakeup event.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

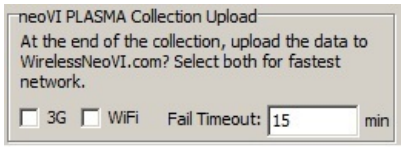

Figure 1: The neoVI PLASMA Collection Upload settings.

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Standalone Logging - Histogram

In VehicleScape DAQ the Standalone Logging of a Histogram collection will log the frequency of data points across a value range over a period of time.

Table 1 describes the settings in Figure 1 and some other settings that affect all collections.

Table 1: Standalone Logging Histogram Settings

Histogram Setting	**Description**
Collection / Log File Name	The name of this collection and the root name of all log files it creates.
Dimensions	In this collection, log a histogram that uses from 1 to 3 axes.
X Y Z Axis Setting	**Description**
Expression	In this collection, for this axis, count the frequency of values created by this expression. The Expression Builder DAQ data source will list signals selected on the VehicleScape DAQ Channels tab.
Value is calculated based on "Time" while expression is non-zero (in seconds)	In this collection, for this axis, count the length of time (in seconds) that the axis expression is non-zero. Use this to count how often an event of varying duration has occurred.
Min/Max Value	In this collection, for this axis, set limits on the value range to keep track of.
Number of Buckets	In this collection, for this axis, set the number of buckets to apply across the value range.
Add to closest bucket	In this collection, for this axis, if the axis expression falls outside the value range then count that value in the closest bucket.
Create dedicated spillover buckets	In this collection, for this axis, add spillover buckets at each end of the value range for counting values that fall outside the value range.
Increment an "invalid" counter	In this collection, for this axis, increment an "invalid" counter each time the axis expression falls outside the value range.
Histogram Sample Options	**Description**
Every	In this collection, start logging at a chosen periodic rate in seconds.

Only when expression is true	In this collection, start logging data at a chosen periodic rate while the expression is true.
Using Trigger	In this collection, start logging data after an expression trigger event.
Trigger when expression is true	In this collection, start logging data after the expression is true for a selected time.
Trigger when expression changes	In this collection, start logging data after the expression changes from its current value.
Trigger when expression increases/decreases	In this collection, start logging data after the expression changes from its current value by some chosen amount.
Manual Trigger	In this collection, start logging data if the neoVI MOTE or other pendant button is pressed.
Always DAQ	In this collection, always request DAQ items even if they are not being logged. Requested DAQ items are diagnostic signals that get polled from ECUs like DTCs, PIDs, ISO 14229 IDs, and MEP A2L file data items. This must be enabled if a start expression uses any requested DAQ item.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

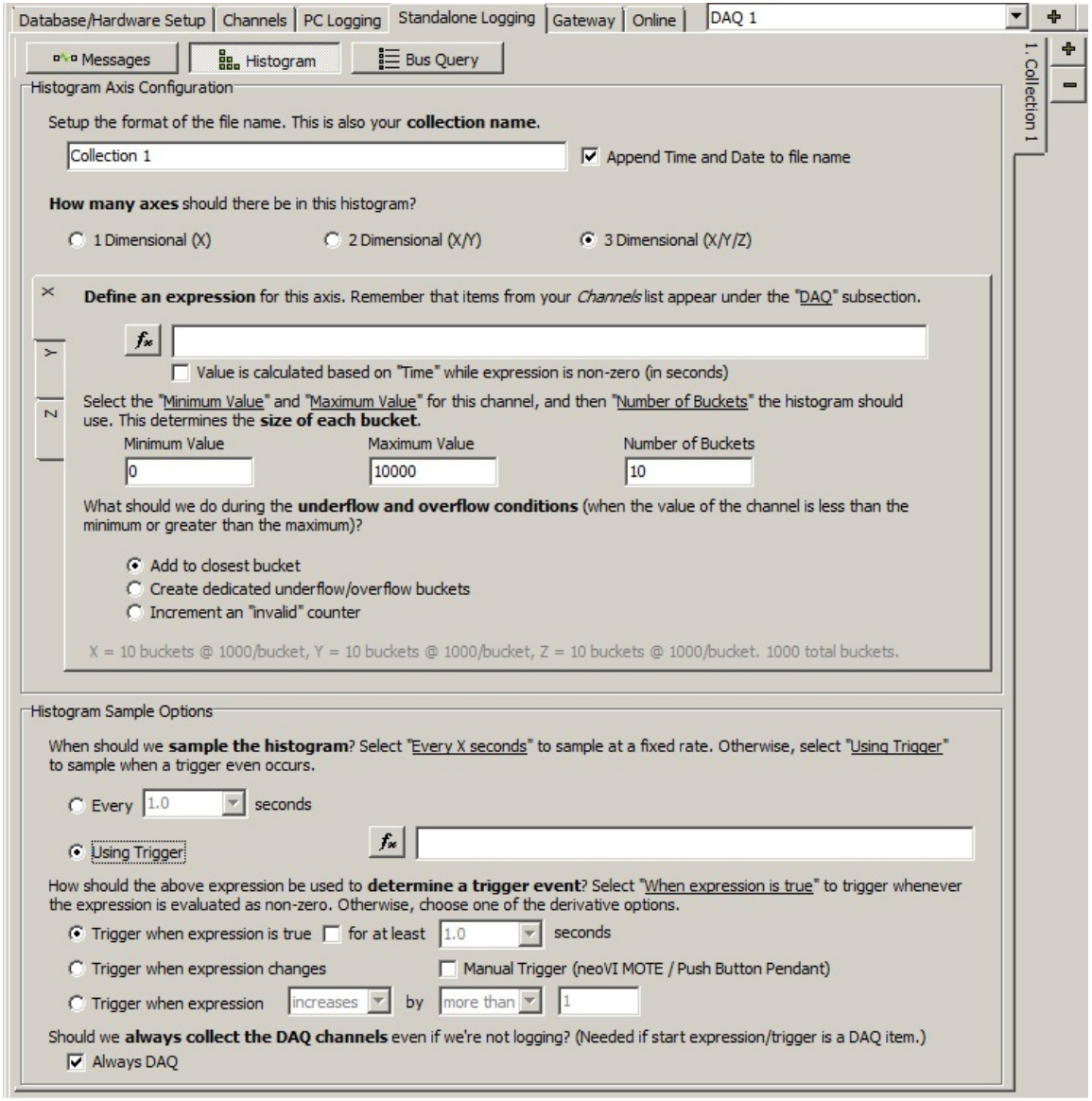
Database/Hardware Setup
Channels
PC Logging
Standalone Logging
Gateway
Online
DAQ 1
Messages
Histogram
Bus Query
1. Collection 1
Histogram Axis Configuration
Setup the format of the file name. This is also your collection name.
Collection 1
Append Time and Date to file name
How many axes should there be in this histogram?
1 Dimensional (X)
2 Dimensional (X/Y)
3 Dimensional (X/Y/Z)
X
Y
Z
Define an expression for this axis. Remember that items from your Channels list appear under the "DAQ" subsection.
Value is calculated based on "Time" while expression is non-zero (in seconds)
Select the "Minimum Value" and "Maximum Value" for this channel, and then "Number of Buckets" the histogram should use. This determines the size of each bucket.
Minimum Value
Maximum Value
Number of Buckets
0
10000
10
What should we do during the underflow and overflow conditions (when the value of the channel is less than the minimum or greater than the maximum)?
Add to closest bucket
Create dedicated underflow/overflow buckets
Increment an "invalid" counter
X = 10 buckets @ 1000/bucket, Y = 10 buckets @ 1000/bucket, Z = 10 buckets @ 1000/bucket. 1000 total buckets.
Histogram Sample Options
When should we sample the histogram? Select "Every X seconds" to sample at a fixed rate. Otherwise, select "Using Trigger" to sample when a trigger even occurs.
Every
1.0
seconds
Using Trigger
How should the above expression be used to determine a trigger event? Select "When expression is true" to trigger whenever the expression is evaluated as non-zero. Otherwise, choose one of the derivative options.
Trigger when expression is true
for at least
1.0
seconds
Trigger when expression changes
Manual Trigger (neoVI MOTE / Push Button Pendant)
Trigger when expression
increases
by
more than
1
Should we always collect the DAQ channels even if we're not logging? (Needed if start expression/trigger is a DAQ item.)
Always DAQ

Figure 1: The Standalone Logging Histogram settings.

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Standalone Logging - Bus Query

In VehicleScape DAQ the Standalone Logging of a Bus Query collection can log a snapshot of DID values and DTCs at one point in time from several ECUs at once.

Table 1 describes the settings in Figure 1 and some other settings that affect all collections.

Table 1: Standalone Logging Bus Query Settings

Bus Query Setting	Description
Base ECU	In this collection, use the DID definitions in this ECU to apply to the entire Bus Query.
Select ECUs	In this collection, log a bus query from these chosen ECUs.
Specify a Range	In this collection, log a bus query from all ECUs within a range of arbitration IDs on a chosen network.
Diagnostic ID of first/last ECU	In this collection, log a bus query from all ECUs within this range of arbitration IDs.
Network of ECUs	In this collection, log a bus query from all ECUs within a range of arbitration IDs on this network.
Select DIDs	In this collection, log a bus query of these chosen DIDs.
Read DTCs	In this collection, log all DTCs (diagnostic trouble codes) from all chosen ECUs if the DTC passes the Status Mask filter.
Read Extended/Snapshot Records	In this collection, include the DTC extended (ISO $19/06) and DTC snapshot (ISO $19/04) records.
Status Mask	In this collection, use this mask to filter which DTCs will get logged.
Read OBD II VIN and Calibration ID	In this collection, use J1979 mode $09 to log the VIN (PID $02) and engine control module calibration ID (PID $04).
Collection Start Options	For this collection, select when to start logging data.
Collection Configuration	For this collection, select when to stop logging data.
Restart Options	For this collection, select when to restart logging data.

neoVI PLASMA Collection Upload	For this collection, select when to upload data to a WirelessNeoVI server.
The following settings affect ALL Standalone Logging collections	
Reporting Options	Options for physical logger feedback and Live Data reporting to a Wireless NeoVI website.
Power Management	Logger sleep and wakeup selections are made here.
Generate	Generates the final script and opens a dialog to send it to ICS hardware that supports standalone logging.

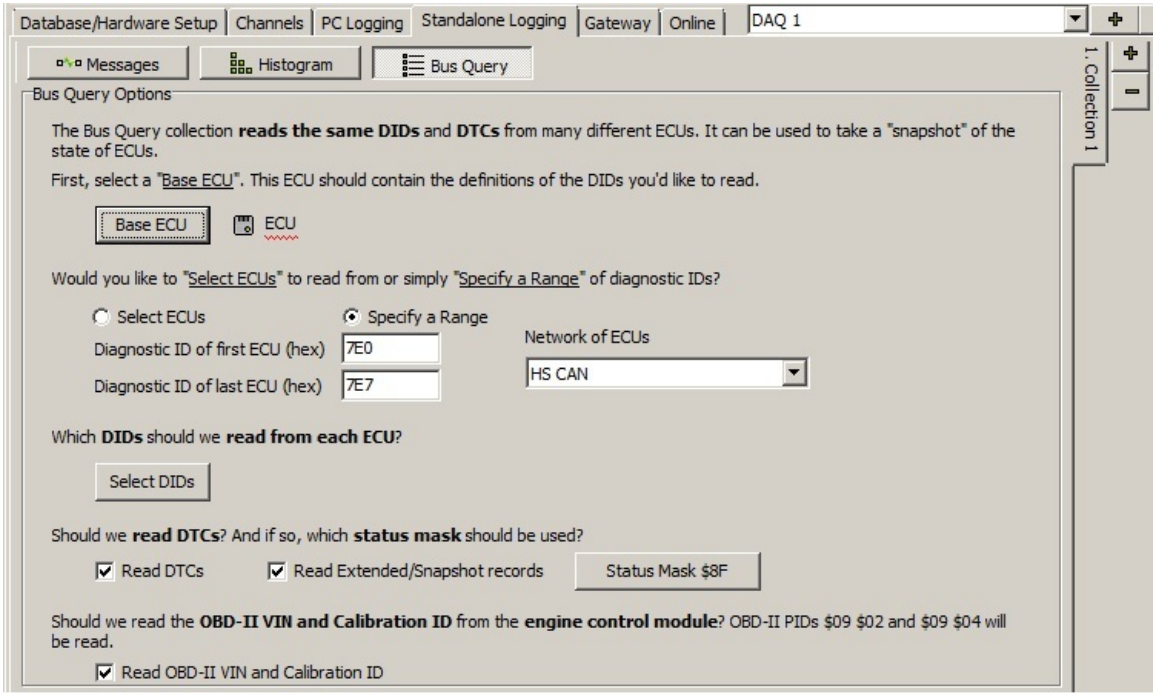
Database/Hardware Setup
Channels
PC Logging
Standalone Logging
Gateway
Online
DAQ 1
Messages
Histogram
Bus Query
1. Collection 1
Bus Query Options
The Bus Query collection reads the same DIDs and DTCs from many different ECUs. It can be used to take a "snapshot" of the state of ECUs.
First, select a "Base ECU". This ECU should contain the definitions of the DIDs you'd like to read.
Base ECU
ECU
Would you like to "Select ECUs" to read from or simply "Specify a Range" of diagnostic IDs?
Select ECUs
Specify a Range
Diagnostic ID of first ECU (hex)
7E0
Diagnostic ID of last ECU (hex)
7E7
Network of ECUs
HS CAN
Which DIDs should we read from each ECU?
Select DIDs
Should we read DTCs? And if so, which status mask should be used?
Read DTCs
Read Extended/Snapshot records
Status Mask $8F
Should we read the OBD-II VIN and Calibration ID from the engine control module? OBD-II PIDs $09 $02 and $09 $04 will be read.
Read OBD-II VIN and Calibration ID

Figure 1: The Standalone Logging Bus Query settings.

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Standalone Logging Reporting Options

In VehicleScape DAQ the Standalone Logging feature has Reporting Options for physical feedback from the logger itself or neoVI MOTE hardware. It is also possible to have Live Data reporting to a Wireless NeoVI website. These settings apply to all Standalone Logging collections.

Refer to Table 1 which describes the settings in Figure 1.

Table 1: Standalone Logging Reporting Options

Reporting Option	Description
LEDs	For all collections, use LEDs to indicate the current logger status. • Red blink = logger script is running • Green blink slow = logging data to the SD card • Green blink fast = pre/post collection is logging after a trigger event
neoVI MOTE	For all collections, use a neoVI MOTE connected to the logger for basic feedback and control features.
neoVI MOTE Network	For all collections, the network used by the logger to communicate with neoVI MOTE.
Buzz on Start/Trigger	For all collections, the neoVI MOTE will make a chosen sound when the logger is started or triggered.
Expressions to Display	For all collections, the neoVI MOTE will use scrolling text to display values of chosen expressions.
Show Triggered Message	For all collections, the neoVI MOTE will use scrolling text to show the logger has triggered.
Wireless NeoVI	For all collections, send Live Data of chosen expressions to the WirelessNeoVI website. (PLASMA only)
Beep on Wakeup (PLASMA only)	For all collections, beep every time neoVI PLASMA wakes up.

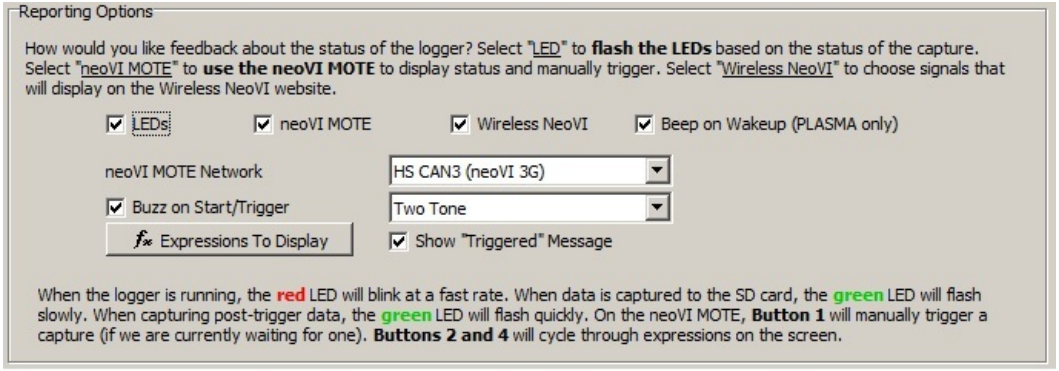
Reporting Options
How would you like feedback about the status of the logger? Select "LED" to flash the LEDs based on the status of the capture. Select "neoVI MOTE" to use the neoVI MOTE to display status and manually trigger. Select "Wireless NeoVI" to choose signals that will display on the Wireless NeoVI website.
LEDs
neoVI MOTE
Wireless NeoVI
Beep on Wakeup (PLASMA only)
neoVI MOTE Network
HS CAN3 (neoVI 3G)
Buzz on Start/Trigger
Two Tone
Expressions To Display
Show "Triggered" Message
When the logger is running, the red LED will blink at a fast rate. When data is captured to the SD card, the green LED will flash slowly. When capturing post-trigger data, the green LED will flash quickly. On the neoVI MOTE, Button 1 will manually trigger a capture (if we are currently waiting for one). Buttons 2 and 4 will cycle through expressions on the screen.

Figure 1: The Standalone Logging Reporting Options.

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Standalone Logging Power Management

In VehicleScape DAQ the Standalone Logging feature has important Power Management settings to control when the logger will go to sleep and wake up. These power mode settings apply to all Standalone Logging collections.

ICS loggers (neoVI FIRE, PLASMA, ION) are designed to be "always on", which means they do not have power on/off switches. Various sleep and wake up settings are available to minimize power consumption while connected to power. It is **CRITICAL** to change the default **Never** sleep setting to avoid killing a car battery!

Refer to Table 1 which describes the settings in Figure 1.

Table 1: Standalone Logging Power Management Settings

Power Management Setting	Description
Disable all logger Tx'ing on this	For all collections, stop all diagnostic transmit messages sent by the logger after the chosen expression becomes true.
Never	For all collections, use default firmware settings configured in hardware with neoVI 3G Explorer. The firmware default for all ICS hardware is Sleep Mode DISABLED, which means never enter sleep mode...always stay awake. This setting can kill a car battery if used incorrectly.
When Message Not Present	For all collections, go to sleep after a chosen message is not received for a chosen period of time.
On Expression	For all collections, go to sleep after a chosen expression is true for a chosen period of time.
On No Bus Activity	For all collections, go to sleep after all chosen networks connected to the logger remain quiet for a chosen period of time. Networks are chosen by clicking **Advanced Options** in the Standalone Logging Generate section.
Time Period	For all collections, the length of time to wait (in seconds) before going to sleep.
Normal Wakeup	For all collections: • When awake, everything runs. • When asleep, the wakeup might not log the first few messages. This mode has the lowest current draw while asleep when compared to Instant and Drowsy

	modes. Any activity on any network connected to the logger will trigger a wakeup and keep it awake until sleep conditions are met again.
Instant (HS/MS) Wakeup	For all collections: • When awake, everything runs. • When asleep, a wakeup from HS or MSCAN can log the first message that woke it up. This mode has higher current draw while asleep when compared to Normal mode. Any activity on any network connected to the logger will trigger a wakeup and keep it awake until sleep conditions are met again.
Drowsy Wakeup	For all collections: (intended for neoVI PLASMA) • When awake, the touch screen remains off, but the script and SD card still run. • When asleep, a wakeup from HS or MSCAN can log the first message that woke it up. For neoVI PLASMA, this mode has the lowest current draw while AWAKE when compared to Normal and Instant modes. Any activity on any network connected to the logger will trigger a wakeup and keep it awake until sleep conditions are met again.
Start a new file when waking up	For all collections, start a new log file after each wakeup instead of appending data to a previous log file.
neoVI PLASMA remote wakeup	For all collections, allow a sleeping PLASMA to be woken up with an SMS text message.
3G	Use the PLASMA 3G wireless link to upload all log files to a WirelessNeoVI server before going to sleep. (slower than WIFI, but usually more available in the USA)
WIFI	Use the PLASMA WIFI wireless link to upload all log files to a WirelessNeoVI server before going to sleep. (faster than 3G, but not as widely available in the USA)
Fail Timeout	For all collections, PLASMA will automatically upload all log files to a WirelessNeoVI server before going to sleep until it is successful or until this timeout (in minutes) expires. This timer is reset after each PLASMA wakeup.

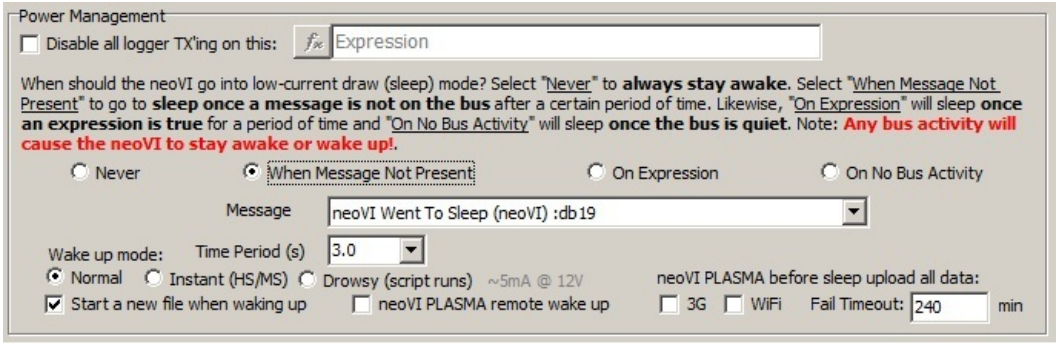
Power Management
Disable all logger TX'ing on this:
Expression
When should the neoVI go into low-current draw (sleep) mode? Select "Never" to always stay awake. Select "When Message Not Present" to go to sleep once a message is not on the bus after a certain period of time. Likewise, "On Expression" will sleep once an expression is true for a period of time and "On No Bus Activity" will sleep once the bus is quiet. Note: Any bus activity will cause the neoVI to stay awake or wake up!.
Never
When Message Not Present
On Expression
On No Bus Activity
Message
neoVI Went To Sleep (neoVI) :db19
Wake up mode:
Time Period (s)
3.0
Normal
Instant (HS/MS)
Drowsy (script runs)
~5mA @ 12V
neoVI PLASMA before sleep upload all data:
Start a new file when waking up
neoVI PLASMA remote wake up
3G
WiFi
Fail Timeout:
240
min

Figure 1: The Standalone Logging Power Management settings.

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Standalone Logging Generate

This is the final step 6 for making a VS3ZIP script to operate neoVI PLASMA in wireless mode.

In VehicleScape DAQ the Standalone Logging feature has options for generating the logger script. Refer to Table 1 which describes the settings in Figures 1 to 3 below.

Table 1: Standalone Logging Generate Settings

Generate Setting	Description
Generate decoding database	Include a decoding database with the script file based upon databases shown on the Database/Hardware Setup tab.
Transfer to SD card	Save the decoding database on the logger SD card.
Save to local file system	Save the decoding database on the PC.
Save setup as VS3ZIP	Save the current setup in VS3ZIP format to copy all databases and the VS3 file into one file. **This format is required for use with the WirelessNeoVI website**.
Save in existing setup	Save the setup in the currently open VS3ZIP file.
Save in data directory	Save the setup in a new VS3ZIP file in the user's Vehicle Spy Data Directory.
Generate for	Select CoreMini if the script will be used in ICS logger hardware. Select Vehicle Spy if the script will be used for desktop debugging purposes.
Hardware	Select the ICS logger hardware that will be running this Standalone Logging script.
Generate button	Click **Generate** to build the Standalone Logging script. This process converts all settings into Function Blocks, Application Signals, and Messages and names them all with a "_VSSAL" suffix. This also opens CoreMini Console which compiles the information and saves it on the PC.

Advanced Generator Options	
Advanced Tab	
Advanced Options button	Click **Advanced Options** shown in Figure 1 to access the dialogs shown in Figures 2 and 3.
Force use of partitions	For all collections, forces the use of partitions; not just on the pre/post collections.
Use EnterExtendedSession	For all collections, when using ISO 14229, use diagnostic job $10/03 to initiate diagnostics with ECUs.
Enable MISC I/O to control external...	For all collections, use the {MISC IO 1 (Value) :neo0-mi0-0-index(0)} output on the ICS logger to control external devices across logger sleep/wake cycles. 0 = off (asleep), 1 = on (awake).
Networks to ignore in sleep expression	For all collections, use this table to select Networks for the Power Management sleep setting = "On No Bus Activity".
Auto Disable Diagnostics Tab	
Auto stop diag requests to ECUs...	For all collections, automatically stop diagnostic requests to ECUs when a separate tool makes a request.
If no diag commands exist from other tool...	For all collections, if no diagnostic commands exist from a separate tool then restart diagnostic commands after timeout (in seconds).
Auto Disable Diagnostics table	For all collections, if a message appears on the chosen network with the chosen arbitration ID then the logger will stop transmitting all diagnostic messages.

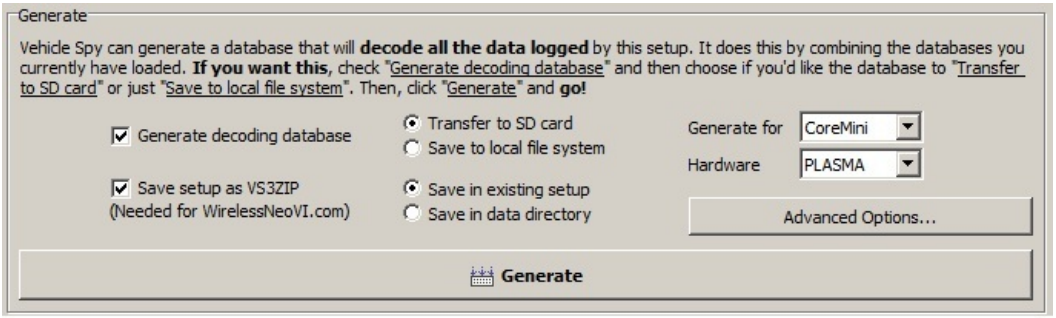
Generate
Vehicle Spy can generate a database that will decode all the data logged by this setup. It does this by combining the databases you currently have loaded. If you want this, check "Generate decoding database" and then choose if you'd like the database to "Transfer to SD card" or just "Save to local file system". Then, click "Generate" and go!
Generate decoding database
Transfer to SD card
Save to local file system
Generate for
CoreMini
Hardware
PLASMA
Save setup as VS3ZIP
(Needed for WirelessNeoVI.com)
Save in existing setup
Save in data directory
Advanced Options...
Generate

Figure 1: The Standalone Logging Generate settings.

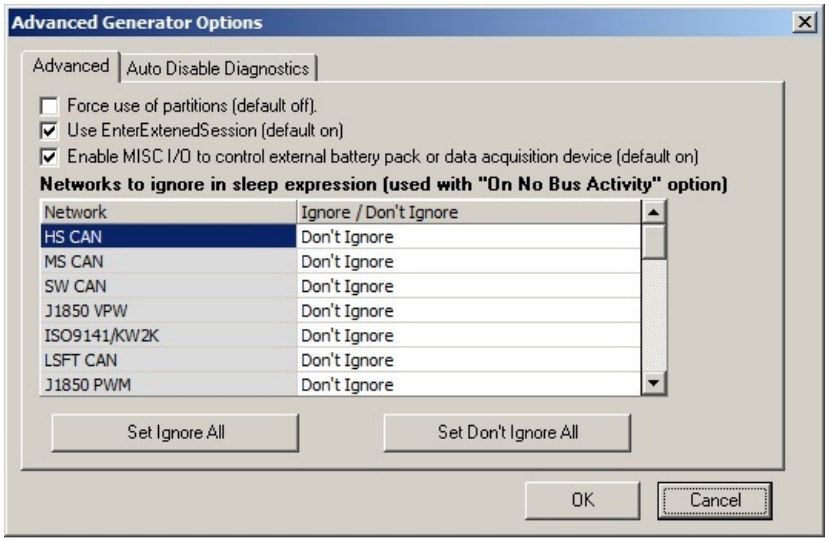

Figure 2: Click "Advanced Options" and click on the Advanced tab to see these settings.

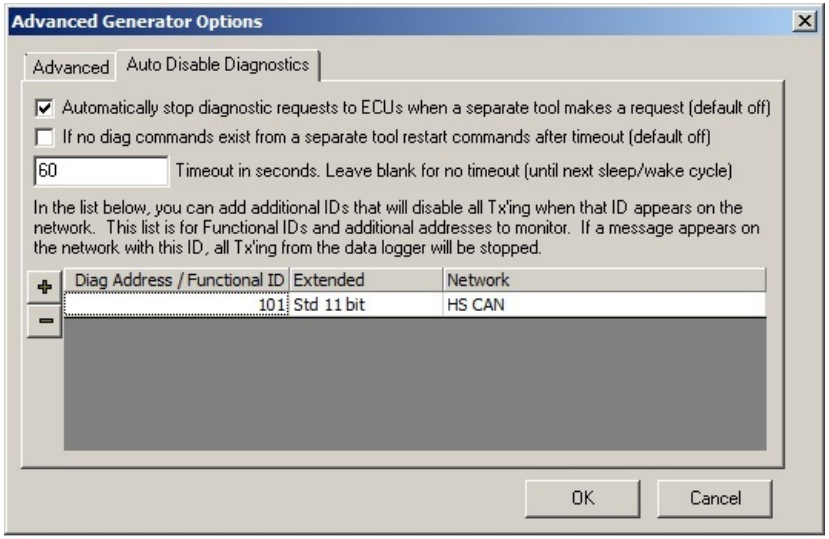
Advanced Generator Options
Advanced
Auto Disable Diagnostics
Automatically stop diagnostic requests to ECUs when a separate tool makes a request (default off)
If no diag commands exist from a separate tool restart commands after timeout (default off)
60
Timeout in seconds. Leave blank for no timeout (until next sleep/wake cycle)
In the list below, you can add additional IDs that will disable all Tx'ing when that ID appears on the network. This list is for Functional IDs and additional addresses to monitor. If a message appears on the network with this ID, all Tx'ing from the data logger will be stopped.
Diag Address / Functional ID
Extended
Network
101
Std 11 bit
HS CAN
OK
Cancel

Figure 3: Click "Advanced Options" and click on the Auto Disable Diagnostics tab to see these settings.

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Last Update: Friday, May 3, 2013

Power Modes

Always On

neoVI PLASMA is designed to be "always on" until its VNET power connection is removed. Various sleep and wake up settings are available to minimize power consumption.

Is My neoVI PLASMA Going to Sleep?

If you see ALL buttons and front facing LEDs suddenly turn yellow, then yes, it is going to sleep shortly.

Touch Screen Display Timeout

The Android operating system includes a screen timeout feature that can help save power. To change the timeout use:

Home / Menu / Settings / Display / Screen Timeout

When the screen timeout occurs the touch screen will go black, but it does NOT shutdown other parts of neoVI PLASMA or put it into any sleep mode. The LEDs will keep working to indicate it is still fully awake. To get the touch screen to appear again, you can tap on it or press any of the off-screen buttons.

Power Up Sequence (Table 1)

Connecting power first to neoVI PLASMA always starts its VS3ZIP script (if present). Connecting USB to PC first will prevent the VS3ZIP script from starting on its own.

Table 1: Results of neoVI PLASMA Power Up Sequence

Power Up Sequence	Result	LED Blink Pattern (neoVI PLASMA)
Power Only	VS3ZIP script starts* (if present)	Blink Red Only (LED #1)
Power then USB	Power 1st - VS3ZIP script starts* (if present) USB 2nd - neoVI PLASMA can be used with the PC, even after the script has started	Alternate Red / Green (LED #1 / #2)
	USB 1st - neoVI PLASMA can be used with the PC	Blink Green Only

USB then Power	Power 2nd - VS3ZIP script does NOT start*	Blink Green Only (LED #2)

*REMEMBER: The Wireless NeoVI website can also start, stop, clear and change VS3ZIP scripts in neoVI PLASMA from far away! So when using neoVI PLASMA with a PC, it is sometimes necessary to disable the Wireless neoVI application to clearly establish control over the device.

Power Management Using Standalone Logging Settings

When making a VS3ZIP script file using Vehicle Spy VehicleScape DAQ, the Standalone Logging Power Management options in Figure 1 offer great flexibility.

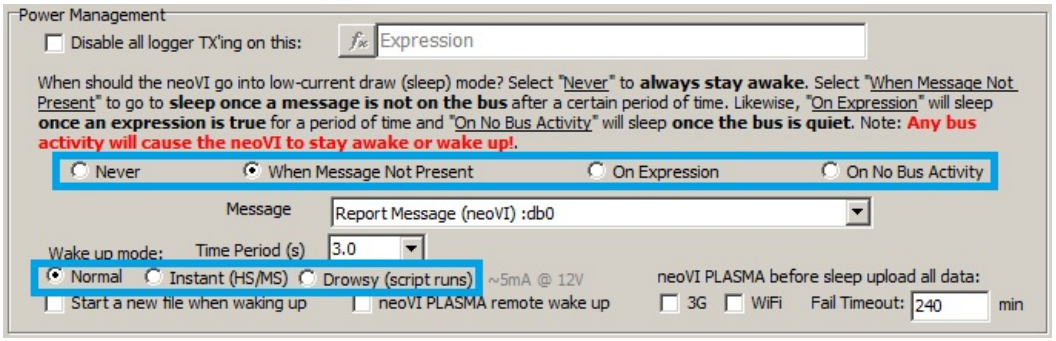
Power Management
Disable all logger TX'ing on this:
Expression
When should the neoVI go into low-current draw (sleep) mode? Select "Never" to always stay awake. Select "When Message Not Present" to go to sleep once a message is not on the bus after a certain period of time. Likewise, "On Expression" will sleep once an expression is true for a period of time and "On No Bus Activity" will sleep once the bus is quiet. Note: Any bus activity will cause the neoVI to stay awake or wake up!.
Never
When Message Not Present
On Expression
On No Bus Activity
Message
Report Message (neoVI) :db0
Wake up mode:
Time Period (s)
3.0
Normal
Instant (HS/MS)
Drowsy (script runs)
~5mA @ 12V
neoVI PLASMA before sleep upload all data:
Start a new file when waking up
neoVI PLASMA remote wake up
3G
WiFi
Fail Timeout:
240
min

Figure 1: The Power Management area on the VehicleScape DAQ, Standalone Logging tab.

Sleep Triggers - There are four selections to choose from, with the last three having an adjustable timer setting.

- Never - never sleep. This option can kill a car battery if not used correctly.
- When Message Not Present - sleep after specific message is not on the network
- On Expression - sleep after an expression is true
- On No Bus Activity - sleep after the network(s) remain quiet

"Wake Up" Modes - These are not really wake up modes because these are actually three power modes that affect how neoVI PLASMA operates when awake OR asleep. These modes are summarized in Table 2.

Table 2: Power Management Modes in Standalone Logging

#	Mode	When Awake	When Asleep	Awake mA @ 12V	Asleep mA @ 12V

0	Normal	Everything runs.	Wakeup might miss first few messages.	~ 700	~ 10
2	Instant (HS/MS)	Everything runs.	Wakeup from HS or MSCAN will log first message.	~ 700	~ 44
7	Drowsy	Screen remains off, but script and SD card runs.	Wakeup from HS or MSCAN will log first message.	~ 180	~ 44

The # column in Table 2 is the value of the "Power Management Mode" signal found in the Vehicle Spy Expression Builder under the Physical IO, Power Management category.

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Last Update: Sunday, May 5, 2013

Wireless NeoVI Website

The Wireless NeoVI website lets you find, monitor, and control all of your neoVI PLASMAs running in wireless mode from vehicles across the globe. The website server archives log files captured from the vehicles and these files can be downloaded to your PC for further analysis at any time.

Log In to Wireless NeoVI

Please contact your Wireless NeoVI administrator for your website address and account information to get started. After entering your information, click **Log In** to access your account. The Password here **IS** case sensitive.

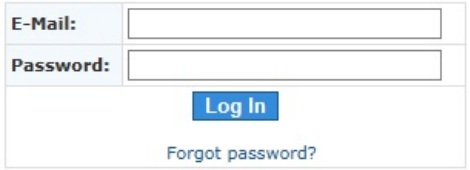

Figure 1: Log In to the Wireless NeoVI website.

Should you ever forget your password, click the **"Forgot Password?"** link below the Log In button. Answer your security question correctly and you will be allowed to reset your password.

After Log In

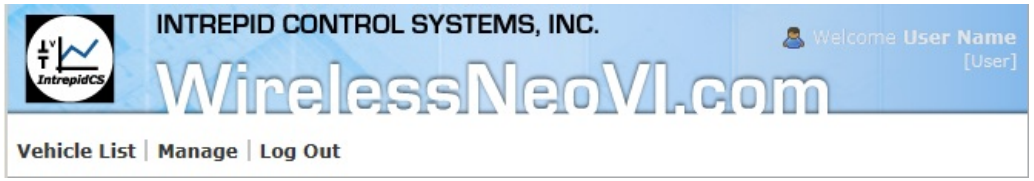

Figure 2: The header area has account information and links to other pages.

After logging in to the website you will start on the Vehicle List page. At the top of the page is a header area shown in Figure 2. The upper right side shows your login name and role. The User and Administrator roles provide different levels of access using different website menu selections.

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Last Update: Thursday, April 25, 2013

WN Website: User Accounts

Wireless NeoVI website users have access to the menu selections shown in Figure 1. Use the links in Table 1 to see further details for each selection.

Administrator accounts have additional Manage menu selections.

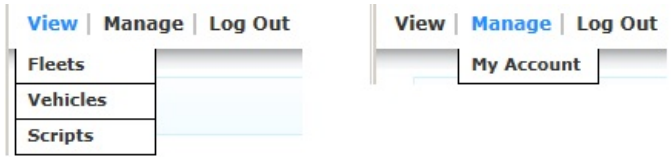

Figure 1: These are the website menu selections at the User level.

Table 1: Wireless NeoVI Website Menu Selections for Users

Menu Selection	Description
View > Fleets	A fleet is a group of vehicles with loggers installed in them. • Access fleet vehicle lists. • Review data sent to the website from vehicles in a fleet. • See where vehicles in a fleet are located. • Send a script to all vehicles in a fleet. • Change settings to decode raw data into various file formats. • Change logger settings in all vehicles in a fleet.
View > Vehicles	A vehicle has a logger installed with a script running in it. • Access a vehicle's Dashboard. • Read vehicle logger alerts. • Review data sent to the website from a vehicle. • See where a vehicle is located. • See when a vehicle last connected to the website. • See when a vehicle last uploaded data to the website.
	A script tells a logger how to operate on its own while connected to a vehicle.

View > Scripts	• See all scripts uploaded to the website by the current account. • Send a script to a vehicle or fleet of vehicles. • Download scripts from the website to a PC.
Manage > My Account	Update the website account and password information.
Log Out	Exit from the website.

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Last Update: Thursday, April 25, 2013

WN Website: View Menu

Wireless NeoVI website user and administrator accounts have access to the same View menu shown in Figure 1. Use the links in Table 1 to see further details for each selection.

Figure 1: The website View menu selections.

Table 1: Wireless NeoVI Website View Menu Selections

Menu Selection	Description
Fleets	A fleet is a group of vehicles with loggers installed in them. • Access fleet vehicle lists. • Review data sent to the website from vehicles in a fleet. • See where vehicles in a fleet are located. • Send a script to all vehicles in a fleet. • Change settings to decode raw data into various file formats. • Change logger settings in all vehicles in a fleet.
Vehicles	A vehicle has a logger installed with a script running in it. • Access a vehicle's Dashboard. • Read vehicle logger alerts. • Review data sent to the website from a vehicle. • See where a vehicle is located. • See when a vehicle last connected to the website. • See when a vehicle last uploaded data to the website.
	A script tells a logger how to operate on its own while connected to a vehicle.

Scripts	• See all scripts uploaded to the website by the current account. • Send a script to a vehicle or fleet of vehicles. • Download scripts from the website to a PC.

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Last Update: Friday, April 26, 2013

WN Website: View Fleets

The Wireless NeoVI website can be used to find, monitor, and control loggers in an entire fleet of vehicles. Use the main menu View -> Fleets to open a table similar to Figure 1.

New fleets of vehicles can be created only by an administrator using the Manage -> Fleets menu.

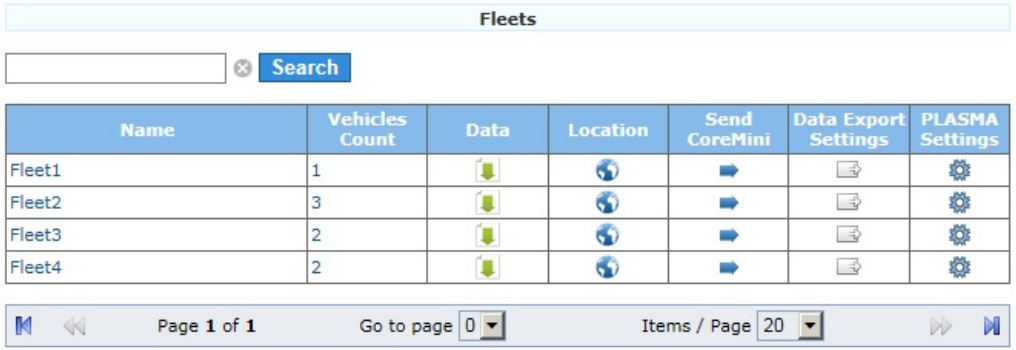

Figure 1: The Fleets view has links to perform various operations across a fleet of vehicles.

Each row in the table represents a fleet of vehicles and the operations that can be done across all vehicles within that fleet. The **Search** field above the table can help find a specific fleet. There are also navigation aids below the table to manage many fleets across multiple tables.

Elements in the table can be clicked to jump to that item. Also, the Name column header can be clicked to sort it by ascending or descending order. Refer to Table 1 for more information about the various columns.

Table 1: Fleets Column Descriptions

Column Name	Description
Name	Fleet name and a link to the vehicles within that fleet.
Vehicles Count	Total number of vehicles assigned to that fleet.
Data	Data Archive of all data log files sent to the website from all vehicles within that fleet.
Location	Last reported GPS location of all vehicles within that fleet.

Send CoreMini	Send a script to all loggers installed on vehicles within that fleet.
Data Export Settings	Select which file formats to export whenever data is received from vehicles within that fleet.
PLASMA Settings	Change logger settings for all vehicles in that fleet.

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Last Update: Friday, April 26, 2013

WN Website: View Vehicles

How Are My Vehicles Doing Today?

The Wireless NeoVI website can be used to find, monitor, and control loggers installed in vehicles. The Vehicles table similar to Figure 1 is displayed immediately after you log in to the website. The table can also be opened using the main menu View -> Vehicles.

New vehicle entries can be created only by an administrator using the Manage -> Vehicles menu.

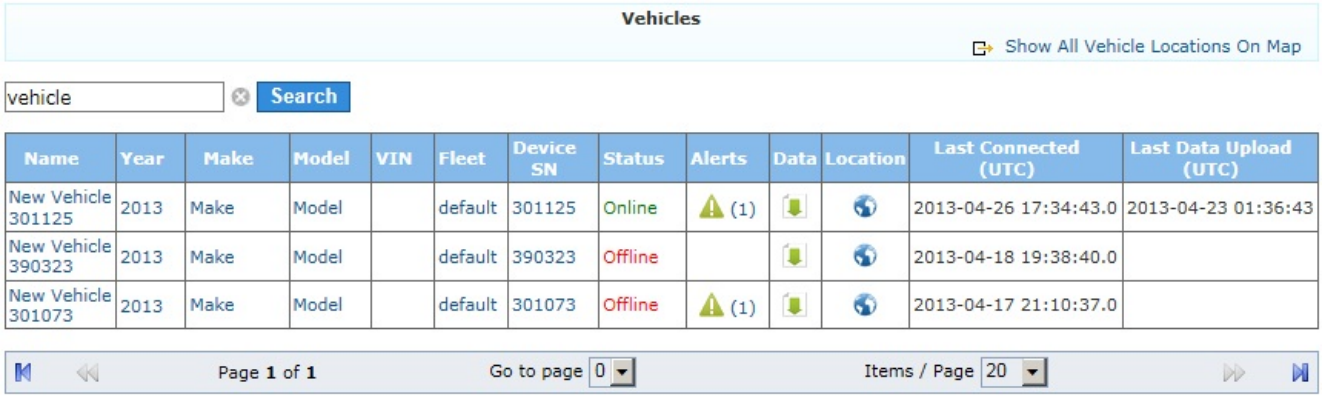

Figure 1: The Vehicles view has links to perform various logger operations.

Each row in the table represents a vehicle and the licensed logger assigned to it. In the upper right corner click Show All Vehicle Locations On Map to see where all vehicles were last reported.

The **Search** field above the table can help find specific vehicles. There are also navigation aids below the table to manage many vehicles across multiple tables.

Many elements in the table can be clicked to jump to that item. Also, some of the column headers can be clicked to sort the table by that column in ascending or descending order. Refer to Table 1 to help understand what the various columns are for.

Table 1: Vehicle List Column Descriptions

Column Name	Description

Name	Vehicle name and a link to the vehicle's Dashboard.
Year	Vehicle year and a link to the vehicle's Dashboard.
Make	Vehicle make or brand name and a link to the vehicle's Dashboard.
Model	Vehicle model and a link to the vehicle's Dashboard.
VIN	Vehicle Identification Number.
Fleet	Fleet name and a link* to see other vehicles in that fleet. (*this link is NOT the same as the View -> Fleets page)
Device SN	Logger serial number and a Dashboard link to the vehicle it is assigned to.
Status	Online - logger is running ok in wireless mode. Offline - logger is not currently detected.
Alerts	Alerts from the logger that may require further attention.
Data	Data Archive of log files sent by the logger to the website.
Location	GPS location history of the vehicle logger.
Last Connected (UTC)	Last date and UTC time the vehicle logger was online with the website.
Last Data Upload (UTC)	Last date and UTC time a data log file was sent from the vehicle logger to the website.

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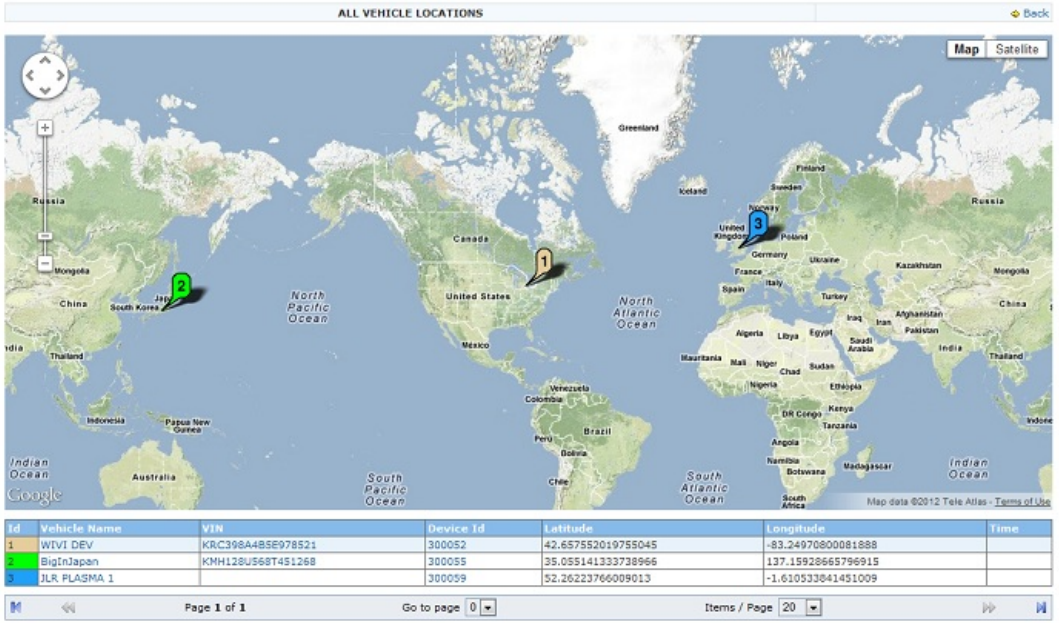
Last Update: Friday, April 26, 2013

neoVI PLASMAs Across the Globe

Figure 1 shows the global reach of the Wireless NeoVI website and its Vehicles view.



Id	Vehicle Name	VIN	Device Id	Latitude	Longitude	Time
1	WIVI DEV	KRC398A4BSE978521	300052	42.657552019755045	-83.249708000081888	
2	BigInJapan	KMH128U568T451268	300055	35.055141333738966	137.15928665796915	
3	JLR PLASMA 1		300059	52.262237660009013	-1.6105338641451009	

Figure 1: Map from the Wireless NeoVI website showing neoVI PLASMAs online around the world.

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Last Update: Friday, April 26, 2013

WN Website: Dashboard

Clicking on a vehicle in the Vehicles view takes you to the Dashboard. This page lets you focus on just one vehicle (and its logger) at a time. The upper area looks similar to Figure 1 and the lower area has many logger commands.

Figure 1: The Dashboard shows detailed information about one vehicle logger.

The Vehicles column on the left lists the online/offline state of all vehicle loggers assigned to the account. It also has links to quickly switch between them.

The Dashboard area displays detailed information about the logger as outlined in Table 1.

Table 1: Dashboard Display Fields

Vehicle	Shows which vehicle you are looking at.	**Activity**	Current logger activity.
Device	Vehicle Identification Number.	**Status**	Status updates indicated with pulsing color.
Last Data Upload (UTC)	Last date and UTC time a log file was sent from the logger to the website.	**Connection**	Wireless link and GPS lock information.
Loaded CoreMini	Name of VS3ZIP script file currently loaded in the logger.	**Script Status**	Shows if script is/is not running and is/is not logging data.

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Last Update: Saturday, April 27, 2013

WN Website: Logger Commands

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard. The lower area of the vehicle Dashboard has many logger commands and an Activity Log similar to Figure 1.

Use the links in Table 1 to see more details for each of the logger commands.

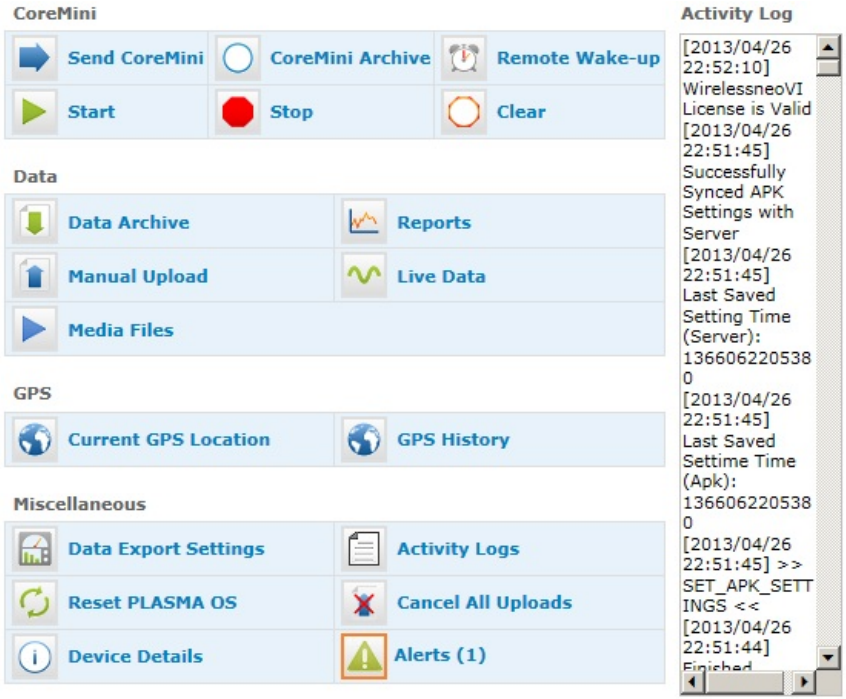

Figure 1: The lower part of the vehicle Dashboard page has many commands and an Activity Log.

Table 1: Logger Commands

Logger Command	Description
CoreMini	These CoreMini commands relate to the logger's script that tells it how to run on its own when connected to the vehicle. A CoreMini compiler in Vehicle Spy generates scripts in a VS3ZIP file format.
Send CoreMini	Sends a VS3ZIP script file from your PC to the logger and starts it.

Send CoreMini	(This overwrites any current script in the logger.)
CoreMini Archive	An archive of VS3ZIP script files previously sent to the logger.
Remote Wake Up	Sends a wake up from the website to the logger. (The logger's SIM card provider must have text messaging enabled for this feature to work.)
Start	Starts the script currently in the logger.
Stop	Stops the script running in the logger.
Clear	Clears the script from the logger.
Data	These Data commands relate to any data captured by the logger.
Data Archive	Review data log files sent from the logger to the website.
Reports	Review diagnostic trouble code (DTC) reports.
Manual Upload	Forces the logger to send its data log files to the website.
Live Data	Watch live signal data from the logger.
Media Files	Review media files captured by the logger.
GPS	These GPS commands relate to logger locations within the Global Positioning System.
Current GPS Location	Shows the last reported location of the logger on a map.
GPS History	Shows where the logger has been over time using a map and a table of time stamped coordinates.
Miscellaneous	These Miscellaneous commands do not fit in the other categories.
Data Export Settings	Selections for the data export file format.
Activity Logs	Review Wireless NeoVI realtime activity logs.
Reset PLASMA OS	Resets the logger's Linux operating system.
Cancel All Uploads	Stops all current and pending data log uploads from the logger to the website.
	Shows the logger's IP address and version numbers of its components.

Device Details	This also has a link to adjust some of the logger's settings.
Alerts	Alerts from the logger that may require further attention.

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Last Update: Saturday, April 27, 2013

WN Website: CoreMini Commands

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard. Below the Dashboard are CoreMini related logger commands (Figure 1) for working with VS3ZIP scripts in the logger.

A VS3ZIP script tells the logger how to operate on its own. A PC running Vehicle Spy is needed to make a VS3ZIP script.

Use the links in Table 1 to see more details for each of the CoreMini commands.

Figure 1: These CoreMini commands can be found below the vehicle Dashboard area.

Table 1: CoreMini Commands

CoreMini Command	Description
Send CoreMini	Sends a VS3ZIP script file from your PC to the logger and starts it. (This overwrites any current script in the logger.)
CoreMini Archive	An archive of VS3ZIP script files previously sent to the logger.
Remote Wake Up	Sends a wake up from the website to the logger. (The logger's SIM card provider must have text messaging enabled for this feature to work.)
Start	Starts the script currently in the logger.
Stop	Stops the script running in the logger.
Clear	Clears the script from the logger.

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Last Update: Sunday, April 28, 2013

WN Website: Send CoreMini

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a CoreMini command called **Send CoreMini** that opens a page similar to Figure 1. This page can send a VS3ZIP script to a vehicle logger or an entire fleet of vehicle loggers.

A VS3ZIP script tells the logger how to operate on its own. A PC running Vehicle Spy is required to make a VS3ZIP script.

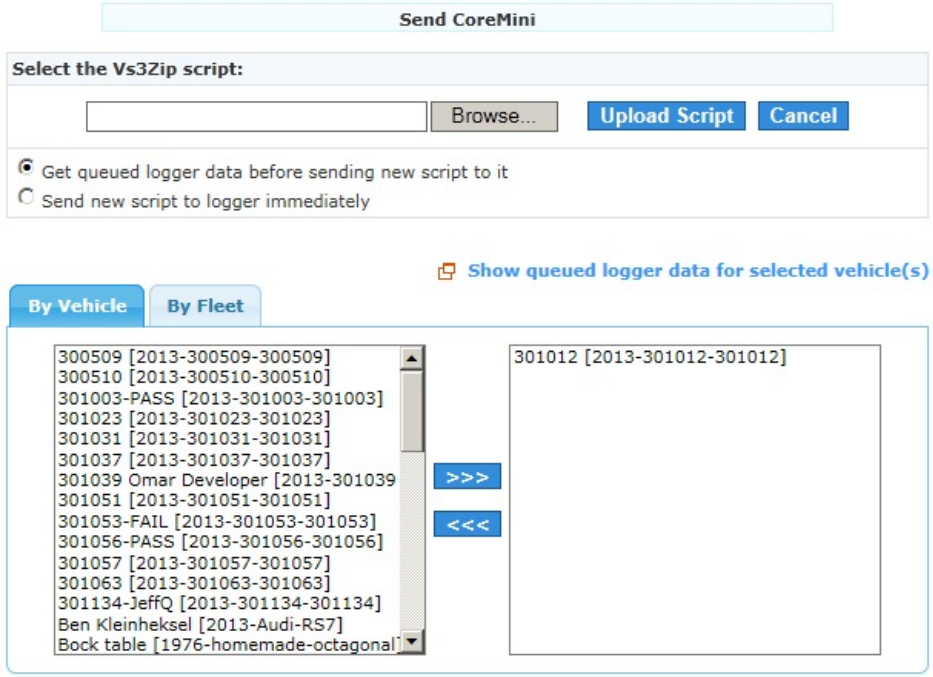

Figure 1: CoreMini scripts can be sent to one vehicle or an entire fleet of vehicles.

Using the "Send CoreMini" Command

Click **Browse** to select which VS3ZIP script file to send then verify the following settings:

- "Get queued logger data before sending new script to it" - forces the logger to send any pending logged data* to the website before it uses the new script.

- "Send new script to logger immediately" - forces the logger to immediately use the new script and cancel all pending logged data* uploads to the website.

- "By Vehicle" & "By Fleet" tabs - use these tabs to select which vehicle or fleet of vehicles will get the new script. The left side is a list of choices and the right side shows which choices have been made. Use the **>>>** and **<<<** buttons in the middle to make and remove selections. USE EXTRA CAUTION IF UPDATING AN ENTIRE FLEET.

After the settings above are verified, click **Upload Script** to send the script from the website to all selected vehicles and fleets. Every uploaded script is also archived for future use.

* The link to **Show queued logger data for selected vehicle(s)** opens a dialog similar to Figure 2. This dialog shows if selected vehicle loggers still have data logs waiting to send to the website. These pending uploads will be canceled if the "Send new script to logger immediately" option is used.

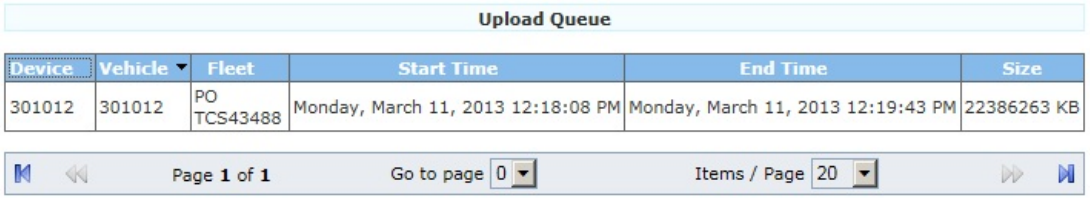

Figure 2: An example of a logger with a data log file waiting to be sent to the website.

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Last Update: Sunday, May 12, 2013

WN Website: CoreMini Archive

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a CoreMini command called **CoreMini Archive** that opens a page similar to Figure 1. This page is an archive of VS3ZIP script files previously sent to the logger. Archived scripts can be sent again to the logger or downloaded to a PC.

A VS3ZIP script tells the logger how to operate on its own. A PC running Vehicle Spy is required to make a VS3ZIP script.

Scripts can also be accessed using the website main menu View -> Scripts.

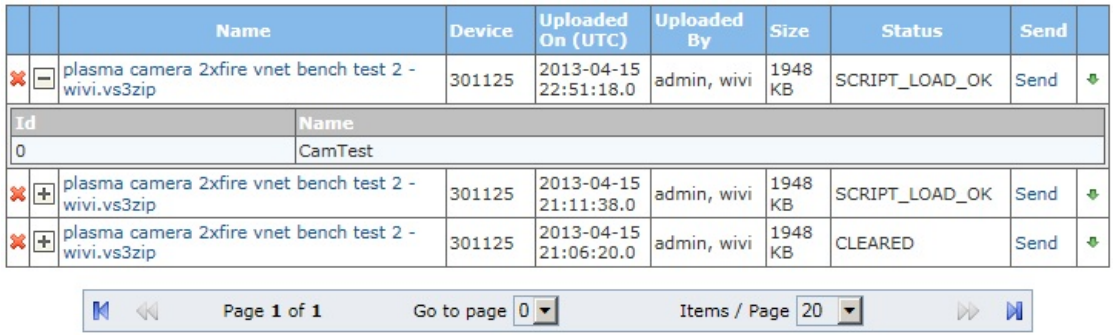

Figure 1: The CoreMini Archive shows all VS3ZIP scripts ever sent from the website to the logger.

Using the CoreMini Archive

On the far left, the red X button (✖) asks to delete the script from the archive.

The +/- button (⊞) shows/hides the names of all data file collections related to that script. Clicking the script name does the same thing as the +/- button.

The **Send** link opens the Send CoreMini page to send that script to a vehicle or group of vehicles.

The download button (⬇) at the far right sends the script file from the archive to a PC.

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Last Update: Sunday, April 28, 2013

WN Website: CoreMini Start, Stop, Clear

Read the Dashboard (Figure 1)

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard that shows these two important bits of information:

- **Loaded CoreMini** - shows which script is currently in the logger.
- **Script Status** - shows if the script is running or not.

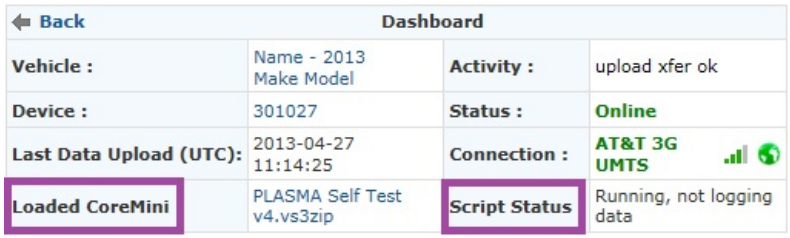

Figure 1: The vehicle Dashboard shows which script is loaded in the logger and if it is running or not.

Start, Stop, Clear (Figure 2)

Below the vehicle Dashboard are CoreMini commands for controlling the VS3ZIP script in the logger.

A VS3ZIP script tells the logger how to operate on its own. A PC running Vehicle Spy is needed to make a VS3ZIP script.

Figure 2: The CoreMini Commands Start, Stop, and Clear directly control the logger's script.

- **Start** - starts the script currently in the logger.
- **Stop** - stops the script currently in the logger.

- **Clear** - clears the script currently in the logger.

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Last Update: Monday, April 29, 2013

WN Website: Data Commands

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard. Below the Dashboard are Data related logger commands (Figure 1) for working with data captured by the logger.

Use the links in Table 1 to see more details for each of the Data commands.

Figure 1: These Data commands can be found below the vehicle Dashboard area.

Table 1: Data Commands

Data Command	Description
Data Archive	Review data log files sent from the logger to the website.
Reports	Review diagnostic trouble code (DTC) reports.
Manual Upload	Forces the logger to send its data log files to the website.
Live Data	Watch live signal data from the logger.
Media Files	Review media files captured by the logger.

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Last Update: Sunday, April 28, 2013

WN Website: Data Archive

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Data command called **Data Archive** that opens a page similar to Figure 1. This page is an archive of all data log files sent from the logger to the website. Data file contents can be reviewed on the website or downloaded to a PC.

The Data Archive page has these three major areas as shown in Figure 1:

Vehicle Logger Information ①
The upper right area is the same as the vehicle Dashboard seen at the top of many pages.

Files and Filters ②
The area on the left lets you select data files and apply various filters to narrow them down a bit. Click the **Show Data** button at the bottom to see a filtered file list appear in the lower right area.

Filtered File List ③
The filtered file list in the lower right lets you do these things:

- **Download** and ( ) buttons - downloads that file to your PC.
- **Delete** button - asks if you want to delete the marked files.
- +/- button ( ) - shows/hides the names of all data files in that collection for that script. Clicking the "Uploaded On (UTC)" collection date does the same thing as the +/- button.
- **View** - displays the contents of that file on the website.

Below the filtered file list, **Archive Storage** shows how much server memory is used up and how much is available for use.

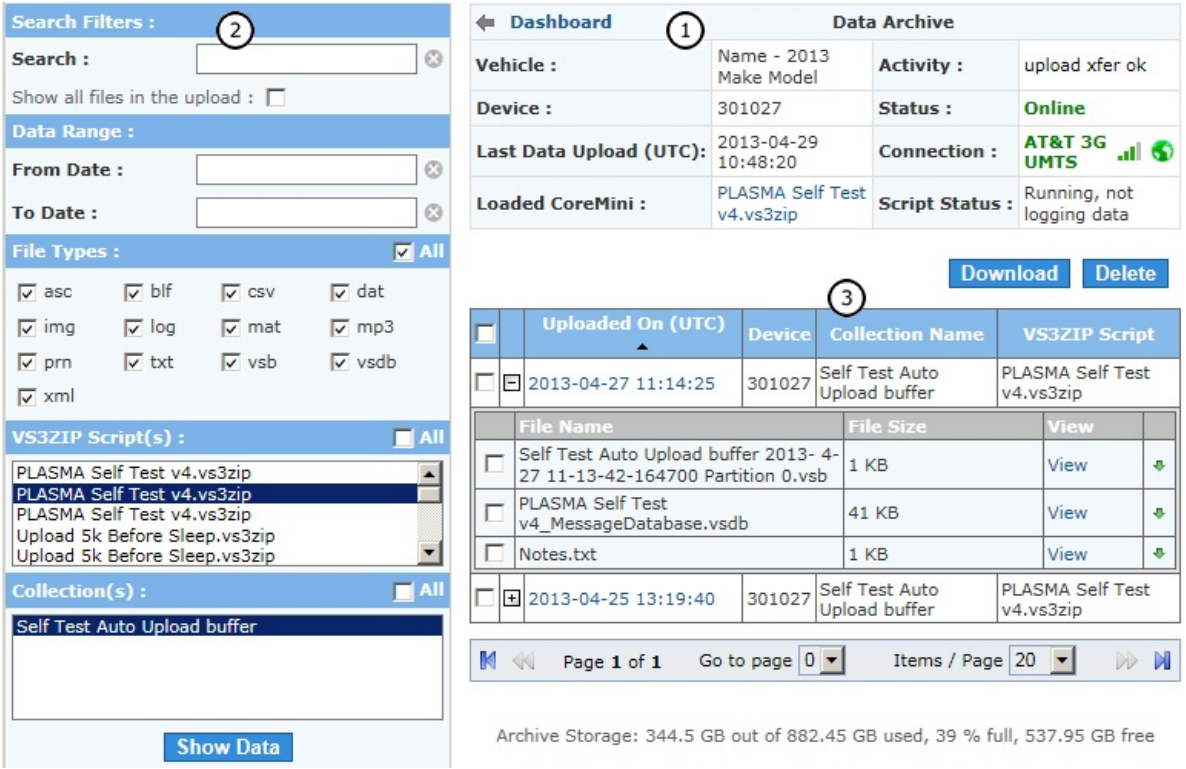

Figure 1: Data files from a logger can be reviewed on the website or downloaded to a PC.

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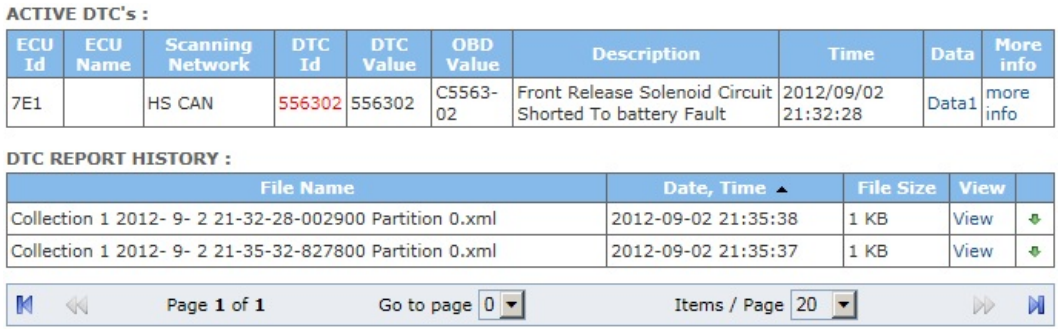
Last Update: Monday, April 29, 2013

WN Website: Reports

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Data command called **Reports** that opens a page similar to Figure 1. This page reports diagnostic trouble code (DTC) information sent from the logger to the website.

For this feature to work, the VS3ZIP script in the logger must have its Bus Query configured properly in the VehicleScape DAQ Standalone Logging settings.



ACTIVE DTC's :

ECU Id	ECU Name	Scanning Network	DTC Id	DTC Value	OBD Value	Description	Time	Data	More info
7E1		HS CAN	556302	556302	C5563-02	Front Release Solenoid Circuit Shorted To battery Fault	2012/09/02 21:32:28	Data1	more info

DTC REPORT HISTORY :

File Name	Date, Time ▲	File Size	View	
Collection 1 2012- 9- 2 21-32-28-002900 Partition 0.xml	2012-09-02 21:35:38	1 KB	View	
Collection 1 2012- 9- 2 21-35-32-827800 Partition 0.xml	2012-09-02 21:35:37	1 KB	View	

Page 1 of 1 Go to page 0 Items / Page 20

Figure 1: This is an example of DTC report information.

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Last Update: Wednesday, May 1, 2013

WN Website: Manual Upload

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Data command called **Manual Upload** that opens a page similar to Figure 1. This page first shows you how much data is available on the device, then lets you decide how much you want, then triggers the device to upload that amount of data to the website Data Archive.

Automatic Upload Options Can Help

If you are manually uploading data often or forgetting to do it entirely, you can change the VS3ZIP script with VehicleScape DAQ Standalone Logging to automate the upload process. Your options include automatic upload at the end of a collection or before neoVI PLASMA goes to sleep. Either choice means neoVI PLASMA pushes data to the archive by itself giving you more time to do something else.

Manual Upload 3 Step Process

1) See What Data Is Available

Click the **Manual Upload** button to see all data collections the device has ready for upload to the website. In the example of Figure 1, only one collection is ready for upload. If the device has a collection that you want then click on its **Upload** link in the Action column.

Start Time ▲	End Time	Action	Size	Updated On
Sunday, August 26, 2012 6:42:27 AM	Sunday, August 26, 2012 7:04:19 AM	Upload	32.0 KB	Sunday, August 26, 2012 7:05:51 AM

Page 1 of 1 Go to page 0 Items / Page 20

Figure 1: In this example, the device has one collection ready to upload to the website.

2) Select How Much Data To Upload

The Data Session dialog is shown (Figure 2) where you can select how much of the data you want. The initial end point slider settings will grab the entire collection, but you can reduce that amount by adjusting them to whatever start and end times you want that are available within that collection. After selecting how much data you want, click the **Upload Selection** button to finish the process.

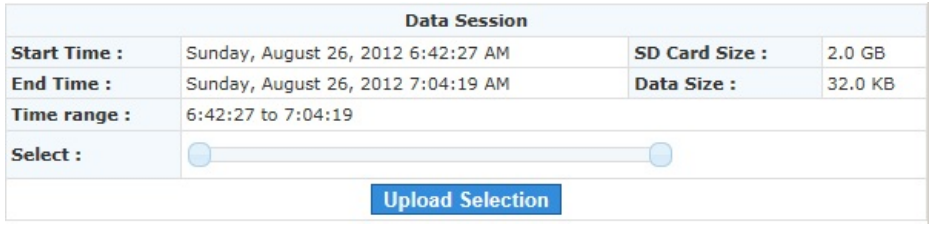

Figure 2: Use the end point sliders to control how much data to upload from the device to the website.

3) Upload The Data

The website triggers the device to upload your selection to the archive. You should see a result similar to Figure 3 if all goes well. When finished, the Data Archive will let you view the data on the website or download it to your PC.

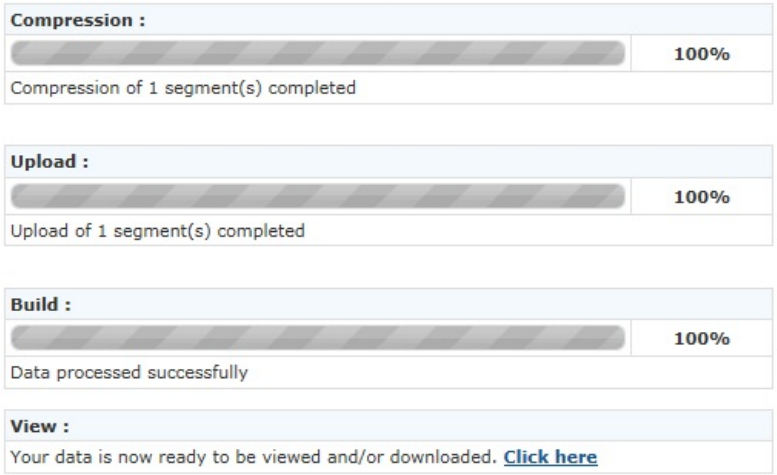

Figure 3: Manual upload from the device to the website archive was successful!

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Last Update: Sunday, May 12, 2013

WN Website: Live Data

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Data command called **Live Data** that opens a page similar to Figure 1. This page shows results of custom expressions in "real time" from the vehicle logger. Note that time delays in this data are affected by wireless communication network speed, dropouts, etc.

For this feature to work, the VS3ZIP script in the logger must have its "Wireless NeoVI" Reporting Option enabled and configured properly in the VehicleScape DAQ Standalone Logging settings.

Use the **Start** and **Stop** buttons to control the live data display.

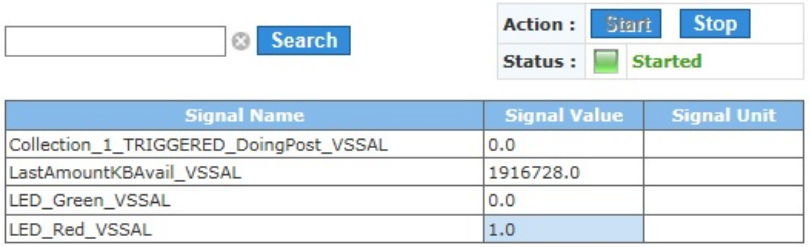

Figure 1: This example shows a neoVI PLASMA reporting its red LED just turned on.

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Last Update: Thursday, May 9, 2013

WN Website: Media Files

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Data command called **Media Files** that opens a page similar to Figure 1. This page is an archive of all media files sent from the logger to the website. Media files can be reviewed on the website itself or downloaded to a PC.

Audio media files can be captured using neoVI MIC hardware connected to a logger's USB port. Capturing video media is a feature under development at Intrepid Control Systems.

Media Files Features

- Media Toolbar - click on the toolbar to control volume, jump forward/back, start, and pause.
- **Delete** button - asks if you want to delete the marked files.
- Play button ( ) - plays that file on the website.
- Download button ( ) - downloads that file to a PC.

Navigation aids below the table help manage many media files across multiple pages.

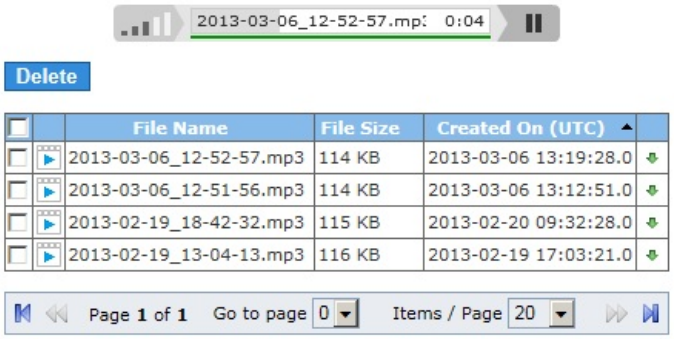

Figure 1: Media files from a logger can be reviewed on the website or downloaded to a PC.

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Last Update: Thursday, May 9, 2013

WN Website: GPS Commands

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard. Below the Dashboard are GPS related logger commands (Figure 1) to view Global Positioning System locations of the logger.

Use the links in Table 1 to see more details for each of the GPS commands.

Figure 1: These GPS commands can be found below the vehicle Dashboard area.

Table 1: GPS Commands

GPS Command	Description
Current GPS Location	Shows the last reported location of the logger on a map.
GPS History	Shows where the logger has been over time using a map and a table of time stamped coordinates.

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Last Update: Sunday, April 28, 2013

WN Website: GPS Commands

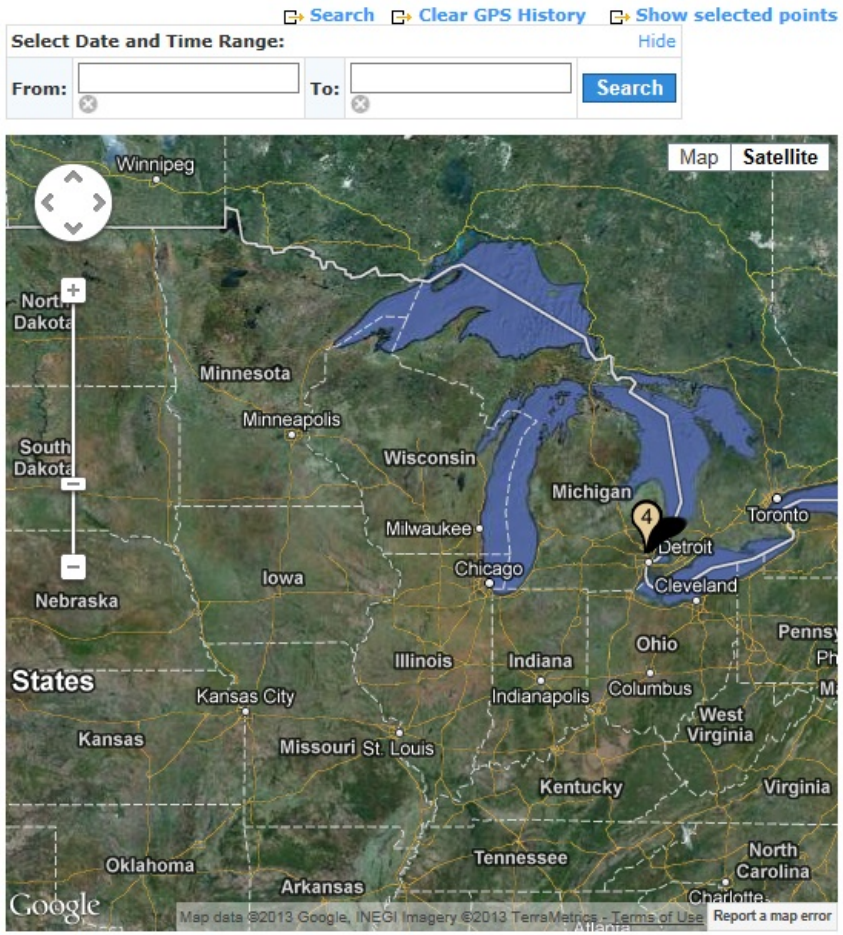
In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard are GPS commands that open pages similar to Figure 1. These pages use Google Maps™ and the Global Positioning System to indicate logger locations around the world.

Current GPS Location shows on a scalable map where the logger last reported itself to be.

GPS History shows where the logger has been over time using a scalable map and a table of time stamped coordinates. The following features can be found along the top of the GPS History area:

- Search - show logger locations for a selected period of time.
- Clear GPS History - asks if you want to delete all GPS history data points.
- Show selected points - shows the selected GPS history data points.



Id	Device SN	Latitude	Longitude	Speed (Km/hr)	UTC Time
1	400001	42.5244	-83.1009	0.03	2013-05-08 13:54:48.0
2	400001	42.5244	-83.1009	0.02	2013-05-08 13:54:32.0
3	400001	42.5244	-83.1008	0.03	2013-05-08 12:16:26.0
4	400001	42.5244	-83.1008	2.18	2013-05-08 12:16:11.0

Figure 1: Hmm...where has that logger been lately?

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Last Update: Thursday, May 9, 2013

WN Website: Miscellaneous Commands

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard. Below the Dashboard are Miscellaneous logger commands (Figure 1) that do not fit in the other logger command categories.

Use the links in Table 1 to see more details for each of the Miscellaneous commands.

Figure 1: These Miscellaneous commands can be found below the vehicle Dashboard area.

Table 1: Miscellaneous Commands

Miscellaneous Command	Description
Data Export Settings	Selections for the data export file format.
Activity Logs	Review Wireless NeoVI realtime activity logs.
Reset PLASMA OS	Resets the logger's Linux operating system.
Cancel All Uploads	Stops all current and pending data log uploads from the logger to the website.
Device Details	Shows the logger's IP address and version numbers of its components. This also has a link to adjust some of the logger's settings.
Alerts	Alerts from the logger that may require further attention. Any unread alerts are indicated with a red box around the icon and the number of alerts currently unread.

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Last Update: Sunday, April 28, 2013

WN Website: Data Export Settings

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Miscellaneous command called **Data Export Settings** that opens a page similar to Figure 1. Enabling other Data Export Formats creates those file types in the Data Archive, assuming correct databases are included within the VS3ZIP script running on the logger.

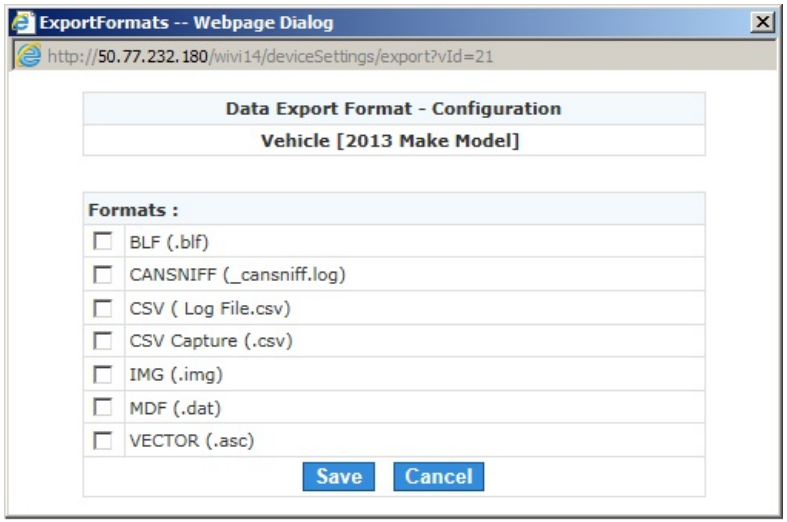

Figure 1: Click "Data Export Settings" to select data export formats.

Table 1: Data Export Formats

Data Export Format	Description
BLF	Raw message data in Vector™ binary log file format.
CANSNIFF	Decoded message data in Vector™ CANSniff format.
CSV Log File	Decoded signal data versus time.
CSV Capture	Decoded message and signal data in CSV format.
IMG	Decoded message and signal data for a MOST network.

MDF	Decoded signal data in MDF format.
VECTOR	Raw message data in Vector™ ASCII format.

How Does a Logger Use the Wireless NeoVI Website Data Export Settings?

There is a hidden process involved when a logger sends its data log files to the website. This process is detailed a bit further here to help advanced users understand how the website **Data Export Settings** are put to use.

1. Extract [always occurs]

In neoVI PLASMA, its SD card #1 named "LOGGER" has Vehicle Spy Archive (VSA) files on it. The VSA files contain the VS3ZIP script and network data captured from the vehicle. When the script triggers neoVI PLASMA to upload data logs to the website, an extraction occurs which pulls the following files from the VSA file on the SD card:

- VSB (Vehicle Spy Binary) - raw data message files.
- VSDB (Vehicle Spy Database) - the combination of all databases built into the VS3ZIP script from the Standalone Logging Database Setup tab.
- Notes.txt - detailed log of the extraction process.

These files are first compressed on neoVI PLASMA to decrease the upload time. The files are then uploaded to the Wireless NeoVI website using the wireless link. The website then decompresses the files into collections in the Data Archive.

2. Export [optional]

Additional files are exported from the extracted data only if one or more of the **Data Export Settings** have been selected.

If a selected export format is a raw message data format then a direct export of the VSB file occurs to that format.

If a selected export format requires decoded message or signal data then the VSDB file is applied to the VSB file before export occurs.

Last Update: Thursday, May 9, 2013

WN Website: Activity Logs

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Miscellaneous command called **Activity Logs** that opens a page similar to Figure 1. This page lets you review and retrieve realtime activity logs from the WirelessNeoVI application that runs on the logger. The activity logs can help troubleshoot wireless communication issues.

The latest logger activity is also shown below the Dashboard in an area to the right of the logger commands.

Activity Log Features

- **Delete** - asks if you want to delete the ☑ marked files.
- **Retrieve APK Log** - forces the logger to send its current activity log to the website.
- **View** - opens the activity log file and allows it be sent to a PC.

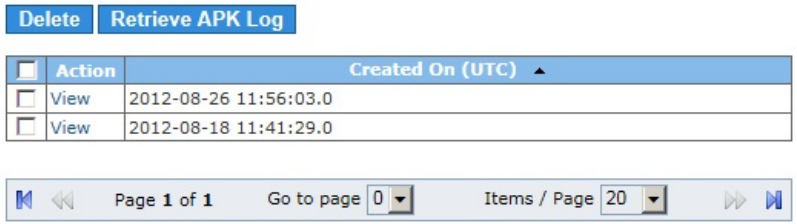

Figure 1: In this example, the logger has two activity logs to look at.

When viewing a log file you should see something similar to Figure 2. You can **Search** the log for clues or **Download** it to a PC for further detective work.

Figure 2: This is a partial example of a wireless real-time activity log from neoVI PLASMA.

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Last Update: Thursday, May 9, 2013

WN Website: Device Details

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Miscellaneous command called **Device Details**. This command shows the logger's current IP address and version level of its various components similar to Figure 1.

The PLASMA WirelessNeoVI Settings button above the version level table provides access to many logger settings.

IP Address :
22.165.90.249

PLASMA WirelessNeoVI Settings

Component	Version	Time (UTC)
Android	2.3.4	2013-04-27 11:14:07.0
APK	1.54.41	2013-04-27 11:14:06.0
Core FPGA	4.3.0	2013-04-27 11:14:06.0
CoreMini compiled by Vehicle Spy	3.6.27	2013-04-27 11:14:07.0
Hardware Revision	1.13.0	2013-04-27 11:14:07.0
HID	4.15.0	2013-04-27 11:14:06.0
ICB Compressor	1.2.4	2013-04-27 11:14:07.0
Linux Kernel	3.0.4	2013-04-27 11:14:07.0
LPIC	2.4.0	2013-04-27 11:14:06.0
MPIC	4.16.0	2013-04-27 11:14:06.0
MPIC Bootloader	1.6.0	2013-04-27 11:14:06.0
PLASMACC	0.0.0	2013-04-27 11:14:07.0

Figure 1: An example of Device Details for a neoVI PLASMA.

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Last Update: Thursday, May 9, 2013

WN Website: PLASMA WirelessNeoVI Settings

A WirelessNeoVI application running on the logger controls all wireless operations. This application has many settings and an activity log scheduler that can be viewed and changed remotely using the website.

View the Logger's WirelessNeoVI Settings

On the Device Details page, the **PLASMA WirelessNeoVI Settings** button opens a page similar to Figure 1 that shows the current settings and activity log schedule.

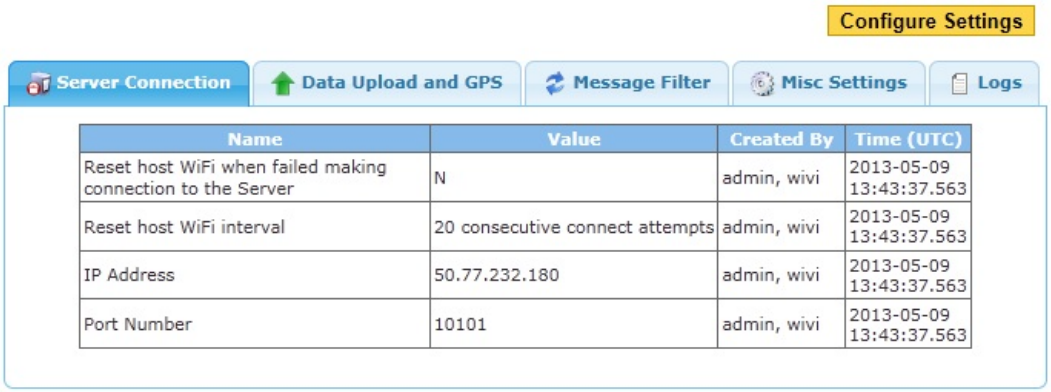

Figure 1: The WirelessNeoVI application running on the logger has many settings.

Change the Logger's WirelessNeoVI Settings

Click the **Configure Settings** button in Figure 1 to open a page similar to Figure 2. This allows the settings and activity log schedule to be changed for one vehicle logger or an entire fleet of vehicle loggers.

Use the **By Vehicle** and **By Fleet** tabs (Figure 2: ①) to select which vehicle or fleet of vehicles will get the new settings. The left side is a list of choices and the right side shows which choices have been made. Use the **>>>** and **<<<** buttons (Figure 2: ②) to make and remove selections. USE EXTRA CAUTION IF UPDATING AN ENTIRE FLEET.

After selecting which loggers to change, use the tabs at Figure 2: ③ to find the various settings and make changes. After all changes have been made click **Submit** (Figure 2: ④) to send all changes to all selected loggers.

The **Load Defaults** button changes all WEBSITE settings on all tabs back to their default values. The Submit button must still be clicked to send those default values to any selected loggers.

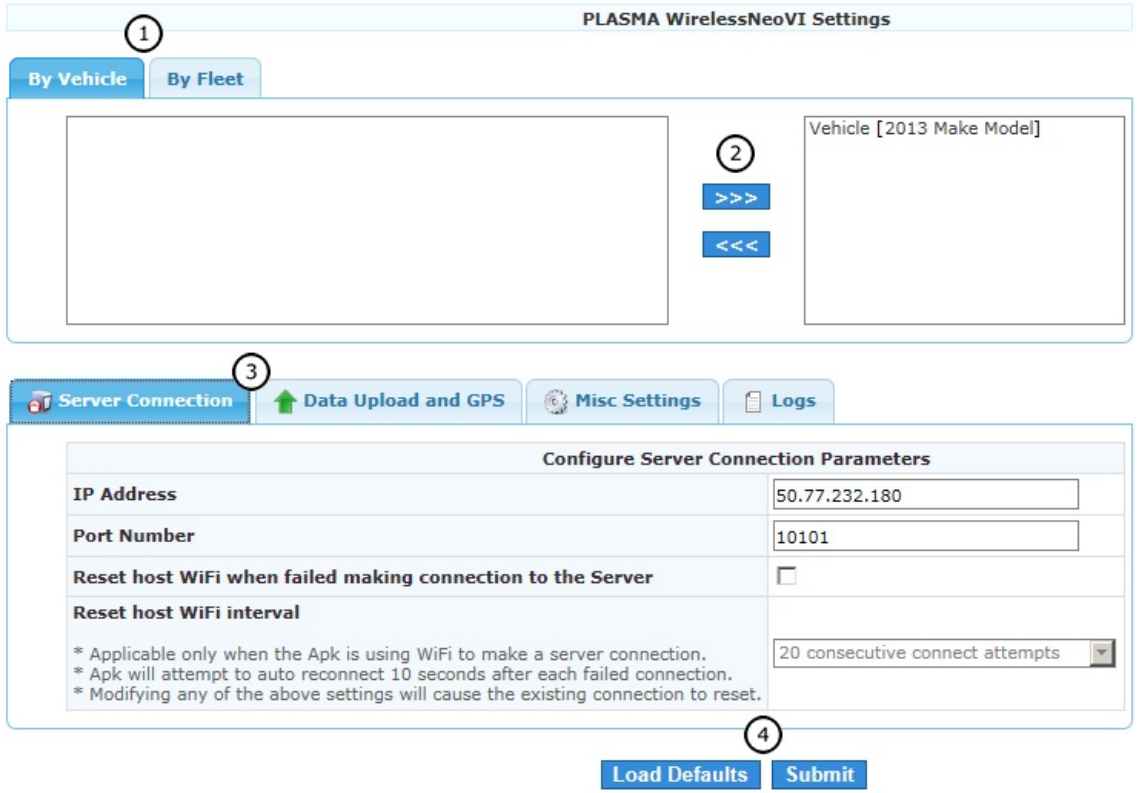

Figure 2: The WirelessNeoVI application settings on the logger can be changed remotely using the website.

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Last Update: Thursday, May 9, 2013

WN Website: Alerts

In View -> Vehicles, clicking on a vehicle takes you to its Dashboard.

Below the vehicle Dashboard is a Miscellaneous command called **Alerts** that opens a page similar to Figure 1. This page shows important alerts about the vehicle logger that may require further attention.

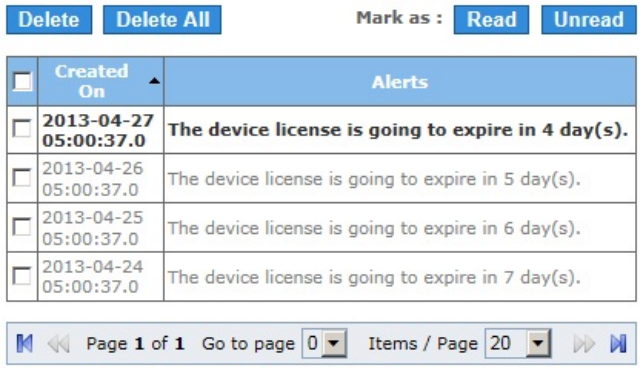

Figure 1: Example of daily alerts for the logger license expiration date.

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Last Update: Friday, May 10, 2013

WN Website: Scripts

The website main menu View -> Scripts opens a page similar to Figure 1. This page is an archive of VS3ZIP script files previously sent to the logger. Archived scripts can be sent again to the logger or downloaded to a PC.

A VS3ZIP script tells the logger how to operate on its own. A PC running Vehicle Spy is required to make a VS3ZIP script.

Scripts can also be accessed using the website CoreMini Archive command.

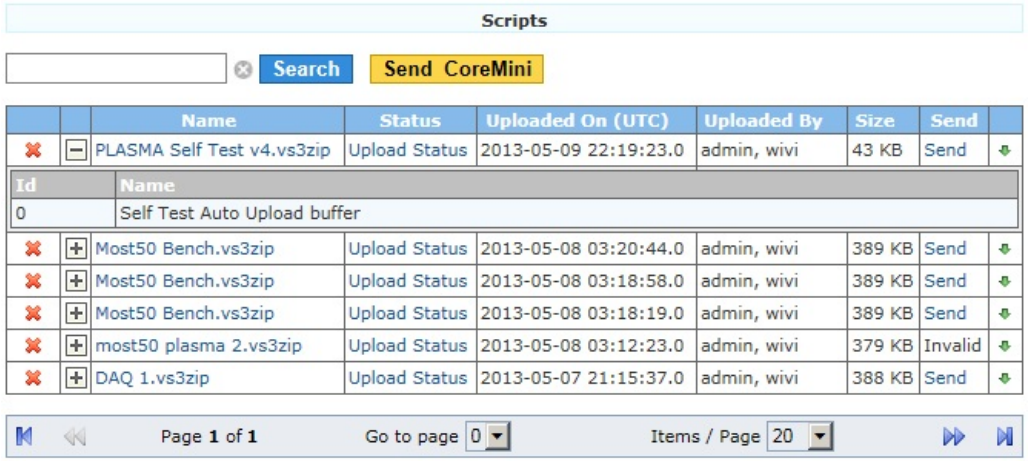

Figure 1: The Scripts page shows all VS3ZIP scripts ever sent from the website to the logger.

Using the Scripts Page

On the far left, the red X button ( ) asks to delete the script from the archive.

The +/- button ( ) shows/hides the names of all data file collections related to that script. Clicking the script name does the same thing as the +/- button.

The **Send CoreMini** button and the **Send** link will open the Send CoreMini page to send a script to a vehicle or group of vehicles.

The download button ( ) at the far right sends the script file from the website to a PC.

Last Update: Friday, May 10, 2013

WN Website: Manage My Account

Clicking **Manage** then **My Account** on any Wireless NeoVI website page lets you manage your account and password. (Figure 1)

Figure 1: All website users can manage their account and password.

Wireless NeoVI website administrators have many additional features on this menu to help manage the website.

Edit Account (Figure 2)

Fill in the data fields, then click **Save** to change account information. The Security Answer is NOT case sensitive.

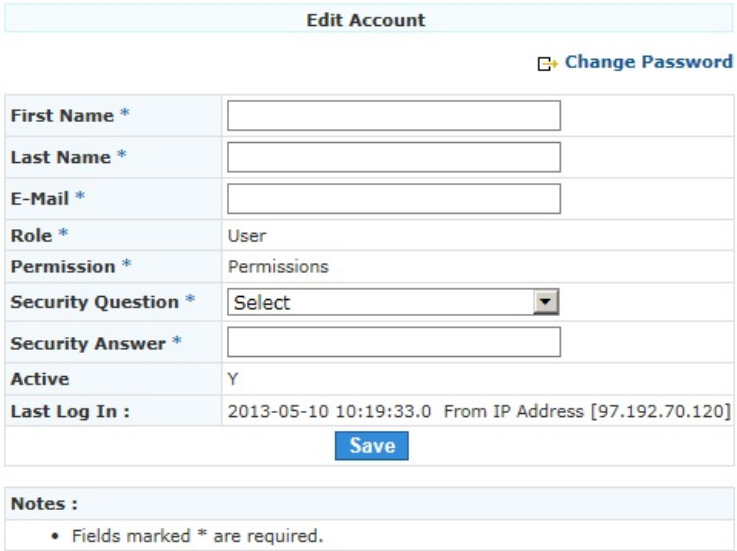

Figure 2: Use Manage / My Account to edit account information.

Change Password (Figure 3)

Click **Change Password** in the upper right of Figure 2 to open the dialog in Figure 3. Fill in the data fields, then click **Save** to change the password. (password IS case sensitive)

If you forget your password, use the **Forgot Password?** link on the Log In page and correctly answer the security question. (security answer is NOT case sensitive)

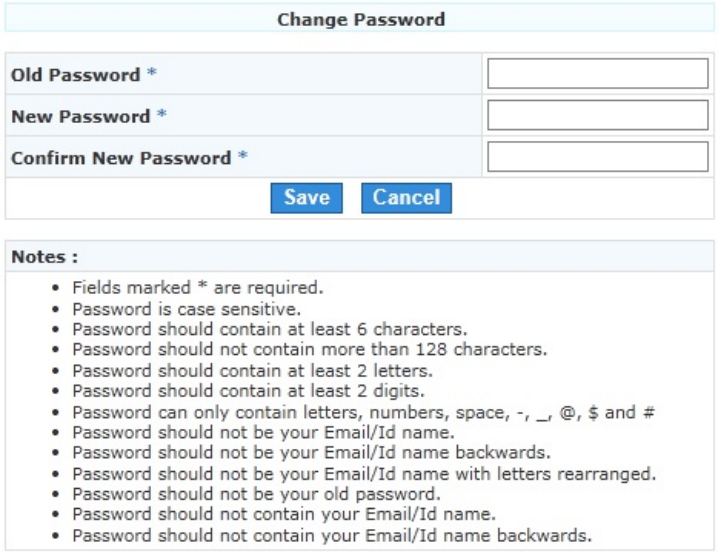
Change Password
Old Password *
New Password *
Confirm New Password *
Save
Cancel
Notes :
Fields marked * are required.
Password is case sensitive.
Password should contain at least 6 characters.
Password should not contain more than 128 characters.
Password should contain at least 2 letters.
Password should contain at least 2 digits.
Password can only contain letters, numbers, space, -, _, @, $ and #
Password should not be your Email/Id name.
Password should not be your Email/Id name backwards.
Password should not be your Email/Id name with letters rearranged.
Password should not be your old password.
Password should not contain your Email/Id name.
Password should not contain your Email/Id name backwards.

Figure 3: Use Manage / My Account then click Change Password to change the password.

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Last Update: Friday, May 10, 2013

WN Website: Administrator Accounts

Wireless NeoVI website administrators have access to the menu selections shown in Figure 1. Use the links in Table 1 to see further details for each selection.

User level accounts have less choices in the Manage menu.

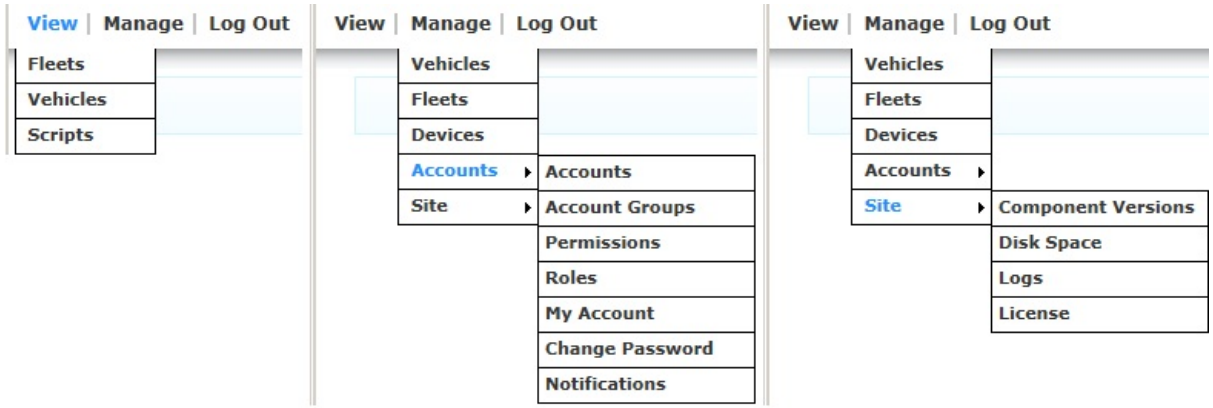

Figure 1: These are the website menu selections at the Administrator level.

Table 1: Wireless NeoVI Website Menu Selections for Administrators

View Menu	Description
Fleets	A fleet is a group of vehicles with loggers installed in them. • Access fleet vehicle lists. • Review data sent to the website from vehicles in a fleet. • See where vehicles in a fleet are located. • Send a script to all vehicles in a fleet. • Change settings to decode raw data into various file formats. • Change logger settings in all vehicles in a fleet.
	A vehicle has a logger installed with a script running in it. • Access a vehicle's Dashboard.

Vehicles	• Read vehicle logger alerts. • Review data sent to the website from a vehicle. • See where a vehicle is located. • See when a vehicle last connected to the website. • See when a vehicle last uploaded data to the website.
Scripts	A script tells a logger how to operate on its own while connected to a vehicle. • See all scripts uploaded to the website. • Send a script to a vehicle or fleet of vehicles. • Download scripts from the website to a PC.
Manage Menu	**Description**
Vehicles	• Add a new vehicle. • Edit vehicle information. • Edit logger information. • Edit fleet information.
Fleets	• Add a new fleet. • Edit fleet information.
Devices	• Add a new logger. • View logger version information. • Edit logger information. • Edit vehicle information.
Accounts > Accounts	• Add a new account. • Edit account information like the security question/answer. • Edit account permissions to access website features. • See when an account last logged into the website. • See account IP address used during its last log in.
Accounts > Account Groups	• Add a new account group. • Edit account group information.

Accounts > Permissions	• Add a new permission template. • Edit a permission template.
Accounts > Roles	See which roles the website currently supports.
Accounts > My Account	Update your account and security information.
Accounts > Change Password	Update your account password.
Accounts > Notifications	• Add a new notification setup. • Edit a notification setup.
Site > Component Versions	View the website component version levels.
Site > Disk Space	See how much disk drive space is being used and how much is free for data log storage.
Site > Logs	• View a website activity log. • Download a website activity log from the website to a PC.
Site > License	• Send a Wireless NeoVI license file (WNLZIP) from a PC to the website. • See when a license file was last uploaded. • Download a license file from the website to a PC.
Logout	**Exit from the website.**

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Last Update: Thursday, April 25, 2013

WN Website: Getting Started for Administrators

The Wireless NeoVI website has some internal interactions that can be unclear for new administrators trying to figure out where to begin.

At a high level, it is important to remember the website is trying to let users control loggers on fleets of vehicles. With that in mind, here is the set of relationships used by the website:

- Licenses are required for devices (i.e. loggers)
- Devices can be assigned to vehicles.
- Vehicles can be assigned to devices and fleets.
- Fleets can be assigned to vehicles and account groups.
- Account groups can be assigned to fleets and accounts.
- Accounts can be assigned to account groups and permission profiles.
- Permission profiles can be assigned to accounts.

Here's a pictorial way to see those relationships:

License => Device <=> Vehicle <=> Fleet <=> Account Group <=> Account <=> Permissions

Workflow For Getting Started

New administrators can use the following workflow to get up and running:

1. Add a user account (and remember the initial password you give it)
2. Add a permission profile and link it to the account
3. Add a device
4. Add a wireless license for the device
5. Add a vehicle and link it to the device
6. Add a fleet and link it to the vehicle
7. Add an account group and link it to the account and fleet
8. Let the user know their initial log in password.

That should be enough to get the ball rolling!

If desired, an email notification can also be added to let the user know each time the logger has sent data to the website. The notification must be linked to the account.

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Last Update: Sunday, May 12, 2013

WN Website: Manage Menu

Wireless NeoVI website administrators have access to all of the Manage menu selections shown in Figure 1. Use the links in Table 1 to see further details for each selection.

User level accounts have less choices in the Manage menu.

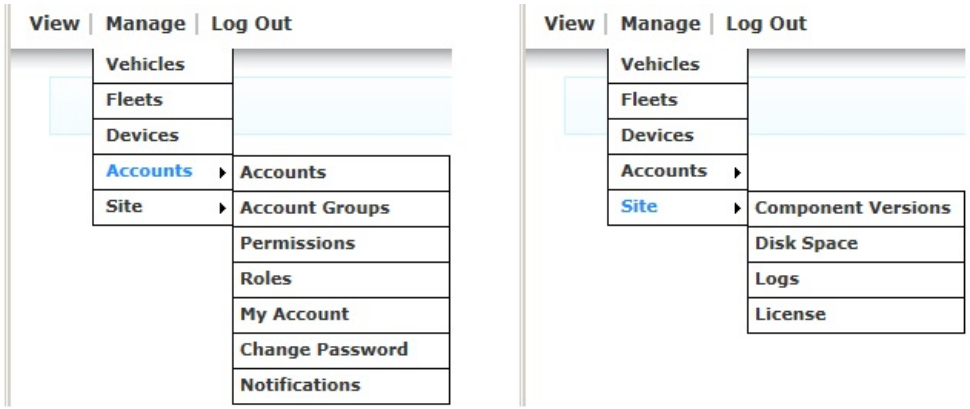

Figure 1: These are the Manage menu selections at the Administrator level.

Table 1: Wireless NeoVI Website Menu Selections for Administrators

Manage Menu Selection	Description
Vehicles	• Add a new vehicle. • Edit vehicle information. • Edit logger information. • Edit fleet information.
Fleets	• Add a new fleet. • Edit fleet information.
	• Add a new logger. • View logger version information.

Devices	• Edit logger information. • Edit vehicle information.
Manage Accounts Menu	**Description**
Accounts > Accounts	• Add a new account. • Edit account information like the security question/answer. • Edit account permissions to access website features. • See when an account last logged into the website. • See account IP address used during its last log in.
Accounts > Account Groups	• Add a new account group. • Edit account group information.
Accounts > Permissions	• Add a new permission template. • Edit a permission template.
Accounts > Roles	See which roles the website currently supports.
Accounts > My Account	Update your account and security information.
Accounts > Change Password	Update your account password.
Accounts > Notifications	• Add a new notification setup. • Edit a notification setup.
Manage Site Menu	**Description**
Site > Component Versions	View the website component version levels.
Site > Disk Space	See how much disk drive space is being used and how much is free for data log storage.
Site > Logs	• View a website activity log. • Download a website activity log from the website to a PC.
Site > License	• Send a Wireless NeoVI license file (WNLZIP) from a PC to the website. • See when a license file was last uploaded. • Download a license file from the website to a PC.

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Last Update: Friday, May 10, 2013

WN Website: Manage Vehicles

Wireless NeoVI website administrators can use the main menu Manage -> Vehicles to open a table similar to Figure 1. This table contains links to add a new vehicle or to edit vehicles, loggers, and fleets already in the system.

A vehicle can have only one device (logger) assigned to it at any given time. A vehicle can be assigned to a fleet that contains multiple vehicles.

Features for Manage Vehicles

- **Search** field & button - filters all tables to help locate specific vehicles.
- **New Vehicle** button - adds another vehicle to the table.
- Red X button ( ) - asks to delete the vehicle in that row.
- Name - click the vehicle's Name to edit the vehicle in that row.
- Device - click the vehicle's Device number to edit the device (logger) installed on that vehicle.
- Fleet - click the vehicle's Fleet name to edit the fleet the vehicle is in.
- Table Page Tools - below the table are tools to manage many vehicles across multiple tables.

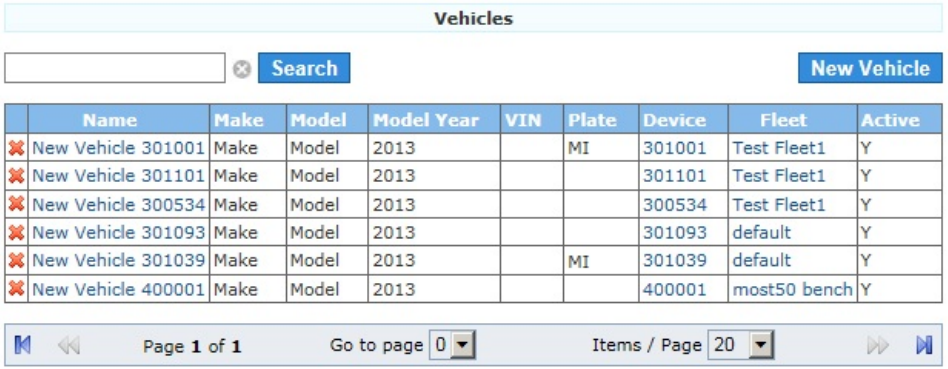
Vehicles
Search
New Vehicle
Name Make Model Model Year VIN Plate Device Fleet Active
New Vehicle 301001 Make Model 2013 MI 301001 Test Fleet1 Y
New Vehicle 301101 Make Model 2013 301101 Test Fleet1 Y
New Vehicle 300534 Make Model 2013 300534 Test Fleet1 Y
New Vehicle 301093 Make Model 2013 301093 default Y
New Vehicle 301039 Make Model 2013 MI 301039 default Y
New Vehicle 400001 Make Model 2013 400001 most50 bench Y
Page 1 of 1
Go to page 0
Items / Page 20

Figure 1: Manage Vehicles shows a table with links to edit any vehicle on the Wireless NeoVI website.

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Last Update: Saturday, May 11, 2013

WN Website: Add or Edit Vehicle

The Manage -> Vehicles table lets an administrator add, view, or edit the vehicle properties described in Table 1 and shown in Figure 1.

Don't forget to click **Save** when editing a vehicle already in the system.

Table 1: Wireless NeoVI Website Vehicle Properties

Vehicle Property	Description
Name	A custom name for the vehicle.
Make	The vehicle's maker or brand name.
Model	The vehicle's model name, model number, or style.
Model Year	The vehicle's model year.
VIN	Vehicle Identification Number.
Plate	The license plate installed on the vehicle.
Odometer	Vehicle odometer at the time the vehicle is added to the website.
Description	Supports a longer custom description of the vehicle.
Device	The device (logger) installed on the vehicle.
Fleet	The fleet that this vehicle is part of.
Active	This checkbox lets an administrator quickly enable/disable the vehicle without needing to add/delete it. This setting does not affect the vehicle or logger itself. This setting just enables/disables the vehicle on the Wireless NeoVI website.

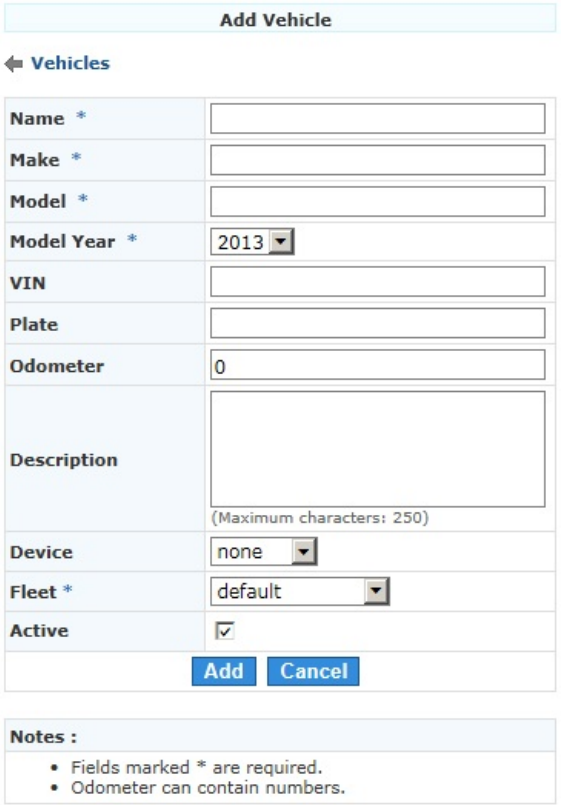

Figure 1: Edit a vehicle to change its name, description, or device and fleet assignments.

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Last Update: Saturday, May 11, 2013

WN Website: Manage Fleets

Wireless NeoVI website administrators can use the main menu Manage -> Fleets to open a table similar to Figure 1. This table contains links to add a new fleet or to edit fleets already in the system.

A fleet can have one or more vehicles and account groups assigned to it. A fleet can be useful for applying some website features across many vehicles and loggers at the same time such as GPS tracking, changing logger scripts, or modifying logger settings.

Features for Manage Fleets

- **Search** field & button - filters all tables to help locate specific fleets.
- **New Fleet** button - adds another fleet to the table.
- Red X button (✖) - asks to delete the fleet in that row.
- Name - click the fleet's Name to edit the fleet in that row.
- Table Page Tools - below the table are tools to manage many fleets across multiple tables.

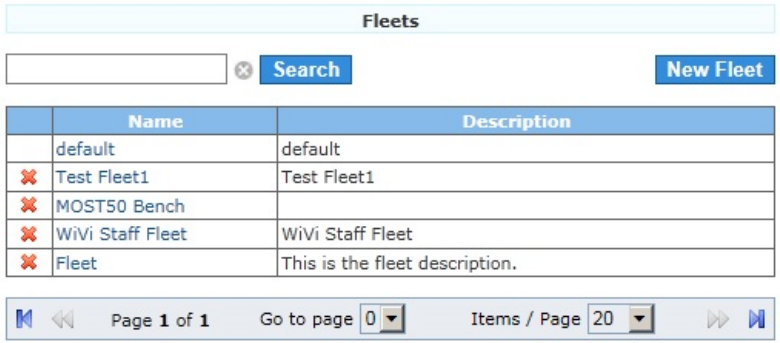

Figure 1: Manage Fleets shows a table with links to edit any fleet on the Wireless NeoVI website.

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Last Update: Saturday, May 11, 2013

WN Website: Add or Edit Fleet

The Manage -> Fleets table lets an administrator add, view, or edit the fleet properties described in Table 1 and shown in Figure 1.

Don't forget to click **Save** when editing a fleet already in the system.

Table 1: Wireless NeoVI Website Fleet Properties

Fleet Property	Description
Name	A custom name for the fleet.
Description	Supports a longer custom description of the fleet.
Account Groups	Account Groups can be assigned or removed from the fleet. This can save time versus changing assignments on one account or one vehicle at a time. The left side is a list of choices and the right side shows which choices have been made. Use the **>>>** and **<<<** buttons in the middle to make and remove selections.
Vehicles	Vehicles can be assigned or removed from the fleet. A fleet of vehicles can be useful for applying some website features across many loggers at the same time. The left side is a list of choices and the right side shows which choices have been made. Use the **>>>** and **<<<** buttons in the middle to make and remove selections.

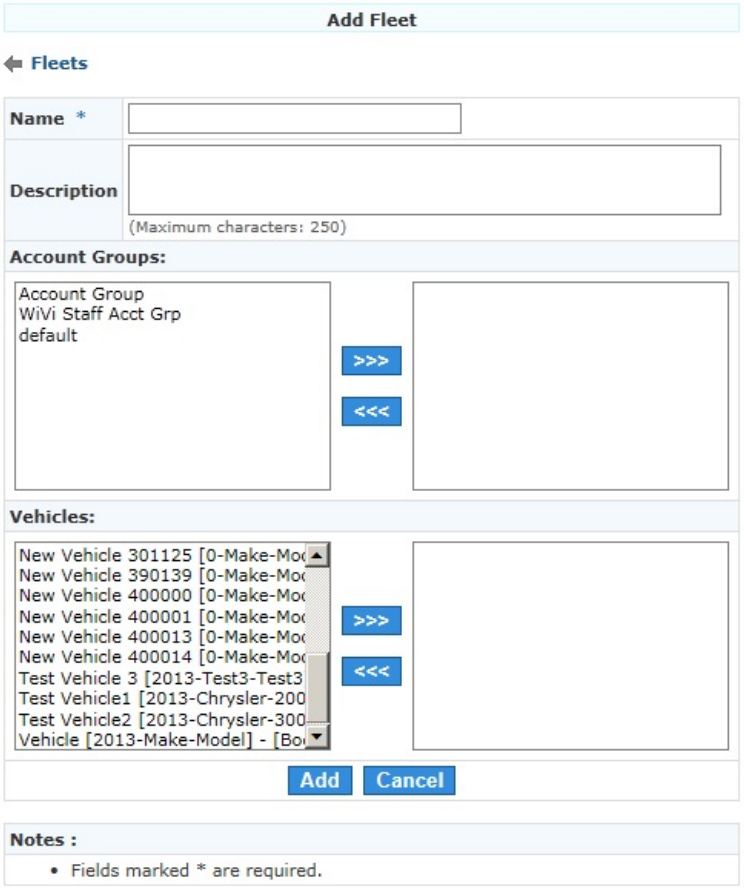

Figure 1: Edit a fleet to change its name, description, or vehicle assignments.

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Last Update: Saturday, May 11, 2013

WN Website: Manage Devices

Note: The term "device" is equivalent to the term "logger" used throughout these help files.

Wireless NeoVI website administrators can use the main menu Manage -> Devices to open a table similar to Figure 1. This table contains links to add a new device or to edit devices and vehicles already in the system.

A device can have only one vehicle assigned to it at any given time.

Features for Manage Devices

- **Search** field & button - filters all tables to help locate specific devices.
- **Device Components Version** button - see a table of all devices and their software versions.
- **New Device** button - adds another device to the table.
- Red X button ( ) - asks to delete the device in that row.
- Device Label / Device SN - click either of these to edit the device in that row.
- Vehicle - click the Vehicle to edit the vehicle that the device in that row is installed in.
- Table Page Tools - below the table are tools to manage many devices across multiple tables.

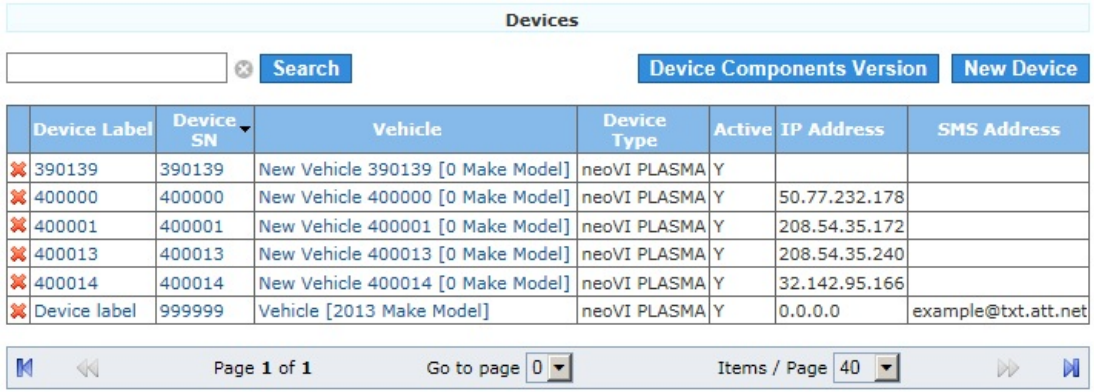
Devices
Search
Device Components Version
New Device
Device Label
Device SN
Vehicle
Device Type
Active
IP Address
SMS Address
390139 390139 New Vehicle 390139 [0 Make Model] neoVI PLASMA Y
400000 400000 New Vehicle 400000 [0 Make Model] neoVI PLASMA Y 50.77.232.178
400001 400001 New Vehicle 400001 [0 Make Model] neoVI PLASMA Y 208.54.35.172
400013 400013 New Vehicle 400013 [0 Make Model] neoVI PLASMA Y 208.54.35.240
400014 400014 New Vehicle 400014 [0 Make Model] neoVI PLASMA Y 32.142.95.166
Device label 999999 Vehicle [2013 Make Model] neoVI PLASMA Y 0.0.0.0 example@txt.att.net
Page 1 of 1
Go to page 0
Items / Page 40

Figure 1: Manage Devices shows a table with links to edit any logger on the Wireless NeoVI website.

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Last Update: Saturday, May 11, 2013

WN Website: Add or Edit Device

The Manage -> Devices table lets an administrator add, view, or edit the device (logger) properties described in Table 1 and shown in Figure 1.

Don't forget to click **Save** when editing a device already in the system.

Table 1: Wireless NeoVI Website Device Properties

Device Property	Description
Device Serial Number	This serial number can be entered only when using **New Device** located above the Manage -> Devices table. If this serial number is incorrect, then this device must be deleted and a new one added.
Device Label	A custom name for the device.
SMS Address	Short Message System (i.e. texting) address associated with the device SIM card. This supports sending a Remote Wake Up from the website to the device.
Device Type	This is always neoVI PLASMA for now, but another exciting wireless device from Intrepid Control Systems is coming soon!
Description	Supports a longer custom description of the device.
Vehicle	The vehicle this logger is installed in.
Active	This checkbox lets an administrator quickly enable/disable the device without needing to add/delete it. This setting does not affect the device itself. This setting just enables/disables the device on the Wireless NeoVI website.

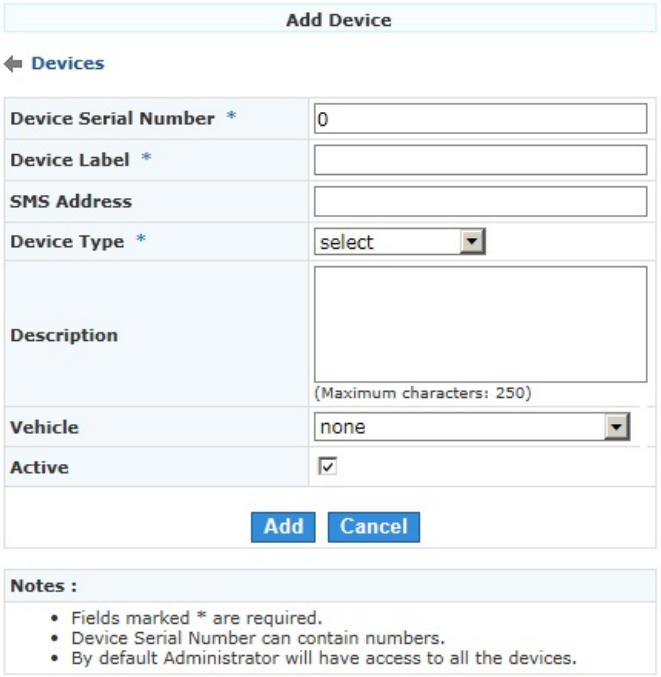

Figure 1: Edit a device to change its label, description, or vehicle assignment.

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Last Update: Saturday, May 11, 2013

WN Website: Manage Accounts Menu

Wireless NeoVI website administrators can control website accounts using the Manage -> Accounts menu selections shown in Figure 1. Use the links in Table 1 to see further details for each selection.

User level accounts have less choices in the Manage menu.

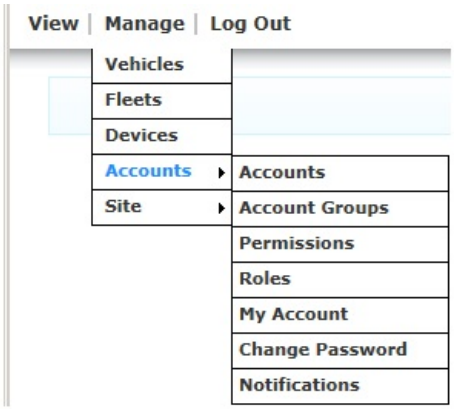

Figure 1: These are the Manage Accounts menu selections at the Administrator level.

Table 1: Wireless NeoVI Website Manage Accounts Menu Selections for Administrators

Menu Selection	Description
Accounts	• Add a new account. • Edit account information like the security question/answer. • Edit account permissions to access website features. • See when an account last logged into the website. • See account IP address used during its last log in.
Account Groups	• Add a new account group. • Edit account group information.
	• Add a new permission template.

Permissions	• Edit a permission template.
Roles	See which roles the website currently supports.
My Account	Update your account and security information.
Change Password	Update your account password.
Notifications	• Add a new notification setup. • Edit a notification setup.

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Last Update: Friday, May 10, 2013

WN Website: Manage Accounts

Wireless NeoVI website administrators can use the main menu Manage -> Accounts -> Accounts to open a table similar to Figure 1. This table contains links to add a new account or to edit accounts and permission profiles already in the system.

An account can have only one permission profile assigned to it. An account can belong to multiple account groups.

Features for Manage Accounts

- **Search** field & button - filters all tables to help locate specific accounts.
- **New Account** button - adds another account to the table.
- Red X button ( ) - asks to delete the account in that row.
- First/Last Name or E-Mail - click any of these to edit the account in that row.
- Permission - click the Permission to edit the permissions profile for the account in that row.
- Table Page Tools - below the table are tools to manage many accounts across multiple tables.

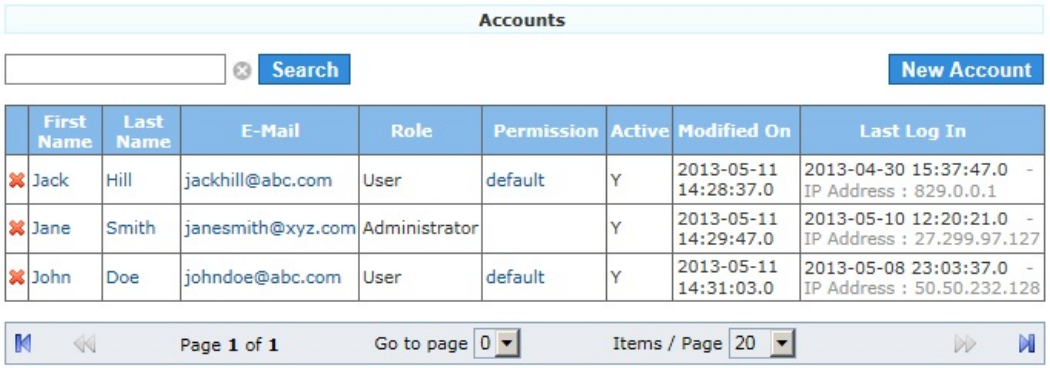

Figure 1: Manage Accounts shows a table with links to edit any account on the Wireless NeoVI website.

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Last Update: Saturday, May 11, 2013

WN Website: Add or Edit Account

The Manage -> Accounts -> Accounts table lets an administrator add, view, or edit the account properties described in Table 1 and shown in Figure 1.

Don't forget to click **Save** when editing an account already in the system.

Table 1: Wireless NeoVI Website Account Properties

Account Property	Description
First Name	Account holder's first name.
Last Name	Account holder's last name.
E-Mail	Account holder's full email address.
Password (**case sensitive**)	This field is visible only when adding a NEW account. This is the initial password that the account holder will need to Log In. The website will force the account holder to change this password after their first log in. To improve security, a valid password must meet many criteria as outlined in the Notes area below.
Confirm Password	This field is visible only when adding a NEW account. Enter the Password again to confirm the original entry.
Role	The account role. Super administrators control all accounts. Administrators control User level accounts.
Permission	The permission profile for the account.
Security Question	The question used to reset the account password.
Security Answer (**NOT case sensitive**)	The answer to the Security Question required to reset a password. Administrators can edit this answer if somebody is trying to reset their password, but is having trouble answering their Security Question. Note: Although the Security Answer here is NOT case sensitive, the account password on the Log In screen IS case sensitive.
Active	This checkbox lets an administrator quickly enable/disable an account without needing to add/delete it.

Account Groups	Account Groups can be assigned or removed from the account. The left side is a list of choices and the right side shows which choices have been made. Use the **>>** and **<<** buttons in the middle to make and remove selections.

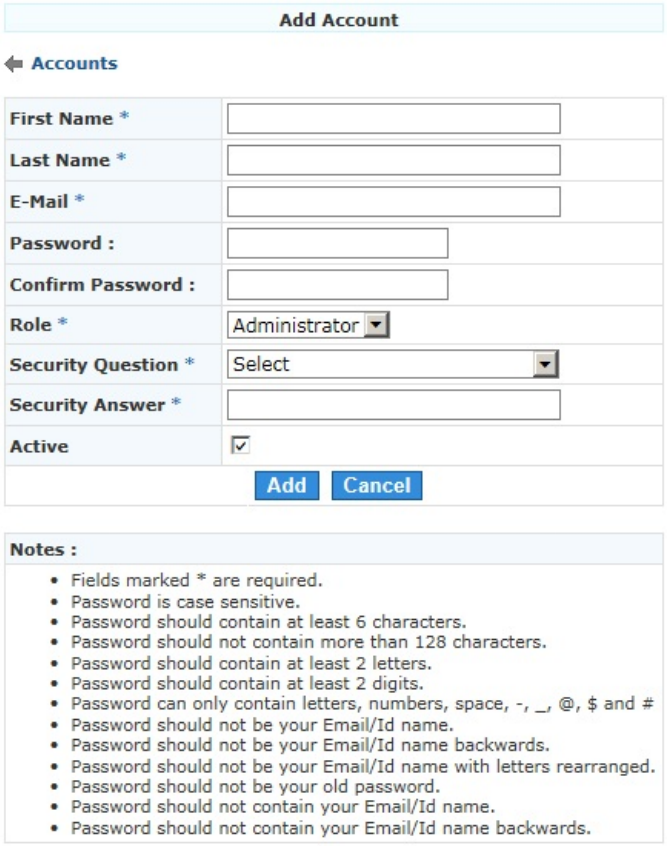
Add Account
Accounts
First Name *
Last Name *
E-Mail *
Password :
Confirm Password :
Role *
Administrator
Security Question *
Select
Security Answer *
Active
Add
Cancel
Notes :
Fields marked * are required.
Password is case sensitive.
Password should contain at least 6 characters.
Password should not contain more than 128 characters.
Password should contain at least 2 letters.
Password should contain at least 2 digits.
Password can only contain letters, numbers, space, -, _, @, $ and #
Password should not be your Email/Id name.
Password should not be your Email/Id name backwards.
Password should not be your Email/Id name with letters rearranged.
Password should not be your old password.
Password should not contain your Email/Id name.
Password should not contain your Email/Id name backwards.

Figure 1: Edit an account to change things like the email address or security question/answer.

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Last Update: Saturday, May 11, 2013

WN Website: Manage Account Groups

Wireless NeoVI website administrators can use the main menu Manage -> Accounts -> Account Groups to open a table similar to Figure 1. This table contains links to add a new account group or to edit account groups already in the system.

An account group can have one or more accounts and fleets assigned to it. An account group can be useful for assigning many vehicles to many accounts at once, instead of doing the assignments one vehicle and account at a time.

Features for Manage Account Groups

- **Search** field & button - filters all tables to help locate specific groups.
- **New Account Group** button - adds another group to the table.
- Red X button (✖) - asks to delete the group in that row.
- Name - click the group's Name to edit the group in that row.
- Table Page Tools - below the table are tools to manage many account groups across multiple tables.

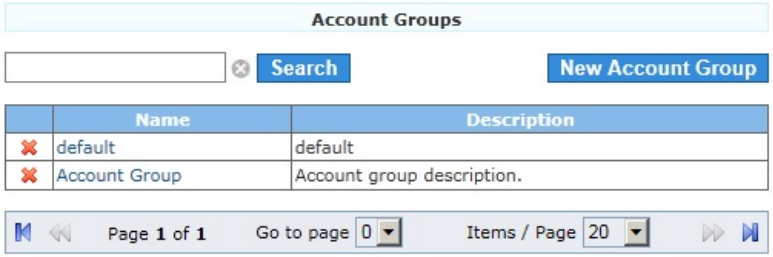

Figure 1: Manage Account Groups shows a table with links to edit any group on the Wireless NeoVI website.

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Last Update: Sunday, May 12, 2013

WN Website: Add or Edit Account Group

The Manage -> Accounts -> Account Groups table lets an administrator add, view, or edit the account group properties described in Table 1 and shown in Figure 1.

Don't forget to click **Save** when editing an account group already in the system.

Table 1: Wireless NeoVI Website Account Group Properties

Account Group Property	Description
Name	A custom name for the account group.
Description	Supports a longer custom description of the account group.
Accounts	Accounts can be assigned or removed from the group. The left side is a list of choices and the right side shows which choices have been made. Use the **>>** and **<<** buttons in the middle to make and remove selections.
Fleets	Fleets can be assigned or removed from the group. Assigning a fleet of vehicles to an account group can save time versus assigning vehicles to accounts one at a time. The left side is a list of choices and the right side shows which choices have been made. Use the **>>** and **<<** buttons in the middle to make and remove selections.

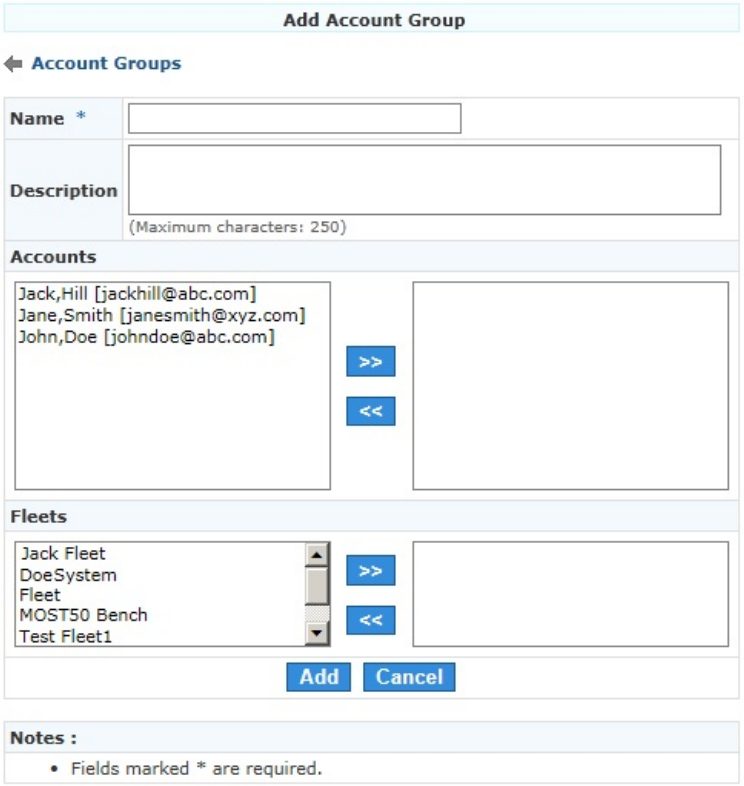

Figure 1: Edit an account group to change its name, assigned accounts, or assigned fleets.

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Last Update: Sunday, May 12, 2013

WN Website: Manage Permissions

Wireless NeoVI website administrators can use the main menu Manage -> Accounts -> Permissions to open a table similar to Figure 1. This table contains links to add and edit permission profiles.

A permissions profile can be assigned to multiple accounts. A permissions profile limits actions and access to website features chosen by the administrator.

Features for Manage Permissions

- **Search** field & button - filters all tables to help locate specific permission profiles.
- **New Permission** button - adds another permission profile to the table.
- Red X button (✖) - asks to delete the profile in that row.
- Name - click the profile Name to edit the permissions profile in that row.
- Table Page Tools - below the table are tools to manage many profiles across multiple tables.

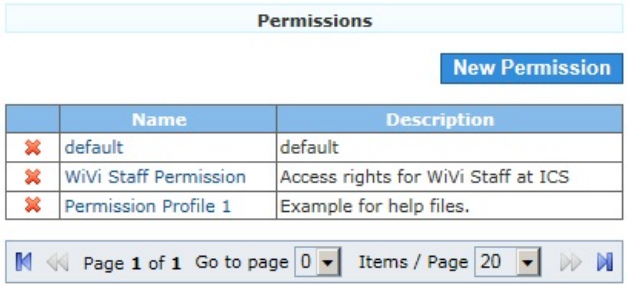

Figure 1: Manage Permissions shows a table with links to edit any permission profile on the Wireless NeoVI website.

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Last Update: Sunday, May 12, 2013

WN Website: Add or Edit Permissions

The Manage -> Accounts -> Permissions table lets an administrator add, view, or edit the permission profile properties described in Table 1 and shown in Figure 1.

A permissions profile limits actions and access to website features for accounts chosen by the administrator. Don't forget to click **Save** when editing a permission profile already in the system.

Table 1: Wireless NeoVI Website Permissions Properties

Permissions Property	Description
Name	Name of the permissions profile.
Description	A description of the profile.
Actions (on/off)	**Description**
Add	Members can add things.
View	Members can view data log files and Realtime Activity Logs.
Delete	Members can delete files on the website.
Download	Members can download files from the website to their PC.
Modules (on/off)	**Description**
CoreMini	Members can use CoreMini commands to control assigned devices.
GPS	Members can see GPS data for assigned devices.
Live Data	Members can see Live Data for assigned devices.
Manual Upload	Members can manually upload data log files from an assigned device to the website.
Data Archive	Members can access data log files uploaded from assigned devices to the website.
Bus Query Report	Members can access Bus Query Reports for assigned devices.
Histograms	Members can see Histograms for assigned devices.

E-Mail	Members can receive email notifications from assigned devices.
SMS	Members can send a Remote Wake Up to assigned devices that have SIM cards with texting enabled.
Logs	Members can access Realtime Activity Logs uploaded from assigned devices to the website.

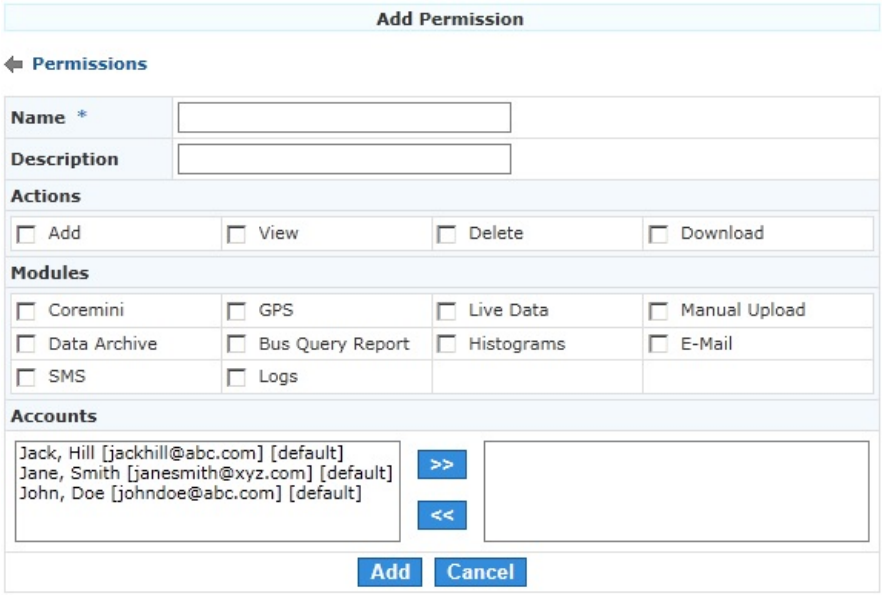

Figure 1: Edit a permissions profile to select which website actions and features are allowed.

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Last Update: Sunday, May 12, 2013

WN Website: Manage Role

The main menu Manage -> Accounts -> Roles shows all possible roles for Wireless NeoVI website accounts (Figure 1).

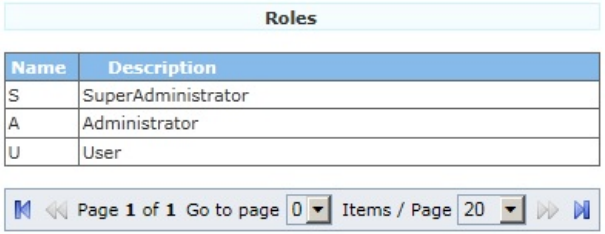

Figure 1: Manage Roles shows a list of current roles supported by the Wireless NeoVI website.

Levels of Account Access

The Wireless NeoVI server has three levels of account access with decreasing levels of website control:

1. **Super Administrator** (full control)
   - can view website activity logs
   - controls all Administrator accounts
   - controls all Permissions and User level accounts
   - can view and reset security answer of all Administrators and Users
   - controls all devices

2. **Administrator** (much control)
   - can view website activity logs
   - cannot control other Administrator accounts
   - controls all Permissions and User level accounts
   - can view and reset security answer of all User level accounts
   - controls all devices

3. **User** (little control)
   - cannot view website activity logs
   - cannot control Administrator accounts
   - cannot control Permissions or other User level accounts
   - cannot view or reset security answer of other accounts

- cannot view or control devices assigned to other accounts

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Last Update: Sunday, May 12, 2013

WN Website: Change Password

The main menu Manage -> Accounts -> Change Password lets administrators change the password only for THEIR OWN account.

Fill in the data fields, then click **Save** to change the password, which IS case sensitive.

If you forget your password, use the **Forgot Password?** link on the Log In page and correctly answer the security question. (security answer is NOT case sensitive)

To improve privacy and security, the log in passwords of other accounts on the website can not be changed by administrators. Administrators can only change the security question and answer in other accounts.

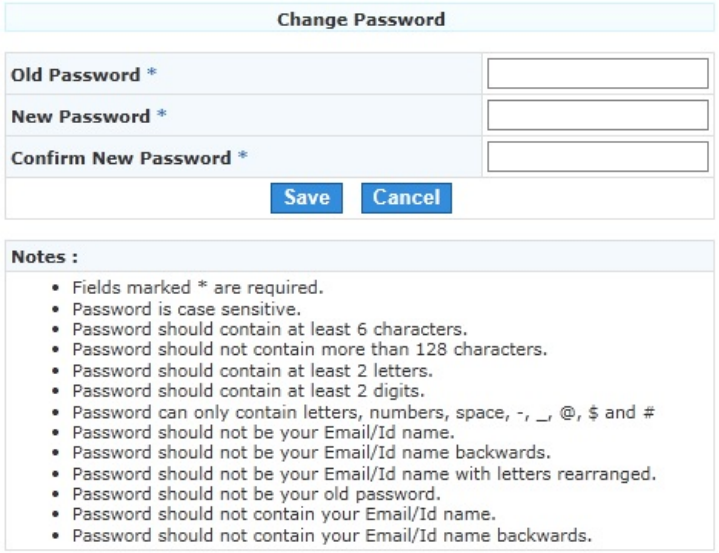
Change Password
Old Password *
New Password *
Confirm New Password *
Save
Cancel
Notes :
Fields marked * are required.
Password is case sensitive.
Password should contain at least 6 characters.
Password should not contain more than 128 characters.
Password should contain at least 2 letters.
Password should contain at least 2 digits.
Password can only contain letters, numbers, space, -, _, @, $ and #
Password should not be your Email/Id name.
Password should not be your Email/Id name backwards.
Password should not be your Email/Id name with letters rearranged.
Password should not be your old password.
Password should not contain your Email/Id name.
Password should not contain your Email/Id name backwards.

Figure 3: Use Manage / My Account then click Change Password to change the password.

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Last Update: Sunday, May 12, 2013

WN Website: Manage Notifications

Wireless NeoVI website administrators can use the main menu Manage -> Accounts -> Notifications to open a table similar to Figure 1. This table contains links to add and edit notification configurations.

An active notification configuration tells the website to send an email to all assigned accounts whenever the logger uploads a data log file from the vehicle to the website server.

The emails can be setup to trigger "By Vehicle" for ANY collection or to trigger "By Collection" for only a specific script collection.

Features for Manage Notifications

- **Add Notification** button - adds another notification configuration to the table.
- Red X button (✖) - asks to delete the configuration in that row.
- Name - click the Name to edit the notification configuration in that row.
- Table Page Tools - below the table are tools to manage many configurations across multiple tables.

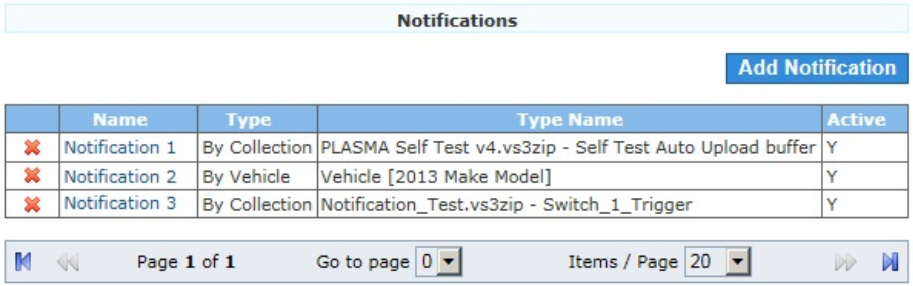

Figure 1: Manage Notifications shows a table with links to edit any notification setup on the Wireless NeoVI website.

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Last Update: Sunday, May 12, 2013

WN Website: Add or Edit Notifications

The Manage -> Accounts -> Notifications table lets an administrator add, view, or edit the notification properties described in Table 1 and shown in Figure 1.

An active notification tells the website to send an email to all assigned accounts whenever the logger uploads a data log file from the vehicle to the website server.

Don't forget to click **Save** when editing a notification configuration already in the system.

Table 1: Wireless NeoVI Website Notification Properties

Notification Property	Description
Name	A custom name for the notification configuration.
Type	• By Vehicle - send emails for ANY collections triggered on the chosen vehicle • By Collection - send emails for only the chosen script collection
By Vehicle -> Vehicle	The vehicle being monitored.
By Collection -> Script	The VS3ZIP script being monitored.
By Collection -> Collection	The script collection being monitored.
Active	This checkbox quickly enables/disables the notification configuration without needing to add/delete it.
Accounts	Accounts can be assigned or removed to receive the email notices about logger activity. The left side is a list of choices and the right side shows which choices have been made. Use the **>>** and **<<** buttons in the middle to make and remove selections.

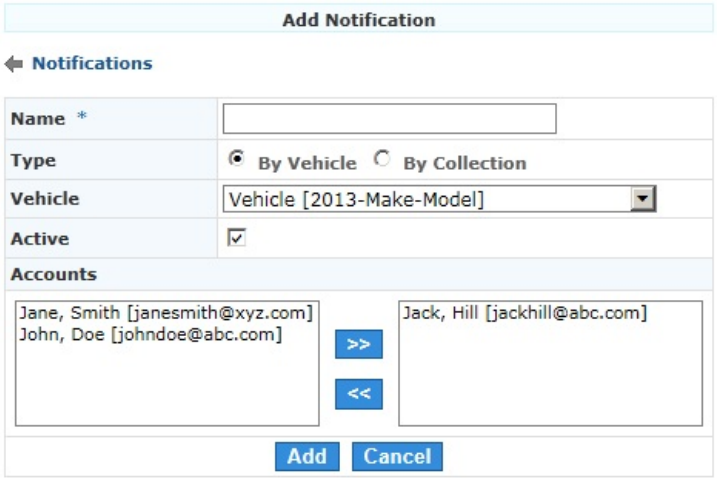

Figure 1: Edit a notification to change assigned accounts, vehicles, or collections.

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Last Update: Sunday, May 12, 2013

WN Website: Manage Site Menu

Wireless NeoVI website administrators can see information about the website and setup licenses using the Manage -> Site menu selections shown in Figure 1. Use the links in Table 1 to see further details for each selection.

User level accounts have less choices in the Manage menu.

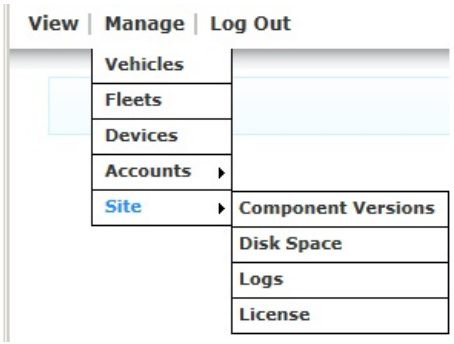

Figure 1: These are the Manage Site menu selections at the Administrator level.

Table 1: Wireless NeoVI Website Manage Site Menu Selections for Administrators

Menu Selection	Description
Component Versions	View the website component version levels.
Disk Space	See how much disk drive space is being used and how much is free for data log storage.
Logs	• View a website activity log. • Download a website activity log from the website to a PC.
License	• Send a Wireless NeoVI license file (WNLZIP) from a PC to the website. • See when a license file was last uploaded. • Download a license file from the website to a PC.

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Last Update: Friday, May 10, 2013

WN Website: Component Versions

The main menu Manage -> Site -> Component Versions shows the version information of all Wireless NeoVI website components similar to Figure 1.

Component Versions

Component	Version	Description	Time (UTC)
ICB	1.2.5	Intrepid Control System's vehicle bus compression.	2013-05-08 16:31:22.8
VSA Extractor	1.93.0	Extracts organized VSB collections from raw VSA data.	2013-05-08 16:31:22.807
VSB Exporter	1.80.0	Database creation and multiple-format data exporter.	2013-05-08 16:31:22.813
Wireless neoVI Distiller	1.9.6	Wireless neoVI data parser and processor.	2013-05-08 16:31:22.82
Wireless neoVI Server	1.9.5	Wireless neoVI device connector and data transport service.	2013-05-08 16:58:57.277
Wireless neoVI Web	1.4.1	Wireless neoVI web application	2013-05-10 20:01:44.0

Figure 1: Manage / Site / Component Versions shows website version information.

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Last Update: Sunday, May 12, 2013

WN Website: Disk Space

The main menu Manage -> Site -> Disk Space shows how much server memory is used up and how much is available for use, similar to Figure 1.

The Data Archive files can eat up this space very quickly if the files are large and the space is small.

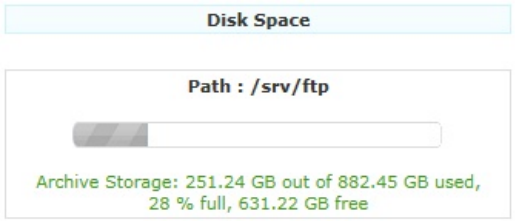

Figure 1: Manage / Site / Disk Space shows how much server memory is used and how much is available.

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Last Update: Sunday, May 12, 2013

WN Website: Site Logs

Wireless NeoVI website administrators can use the main menu Manage -> Site -> Logs to see a page similar to Figure 1. This page shows logs of website activity that can be downloaded to a PC.

To view a log, select the File in the pull down list in the upper left corner and click **View**.

Click the **Download** link to download that activity log from the website to a PC.

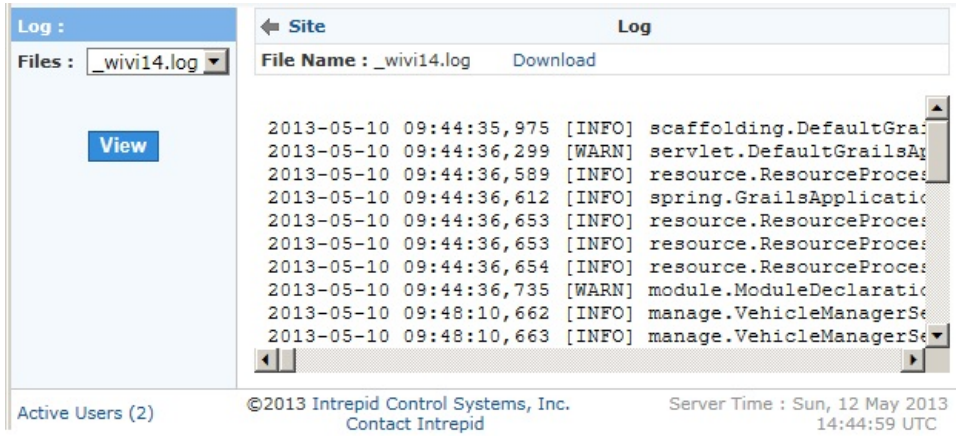

Figure 1: Manage / Site / Logs provides logs of all Wireless NeoVI website activity.

On a related note, all administrators have an **Active Users** link at the very bottom of all website pages. The link shows how many accounts are currently logged in and clicking it shows which specific accounts they are.

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Last Update: Sunday, May 12, 2013

WN Website: Site Licenses

Wireless NeoVI website administrators can use the main menu Manage -> Site -> License to see a page similar to Figure 1. This page shows all registered logger licenses and allows new licenses to be added.

Each logger requires a WNLZIP license file from Intrepid Control Systems to allow operation on the Wireless NeoVI website.

Features for Site License List

- **Search** field & button - filters all tables to help locate specific licenses.
- **Upload** button - sends a WNLZIP license file from a PC to the website.
- Red X button ( ) - asks to delete the license in that row.
- Upload Status - shows the Wireless NeoVI license expiration date for the logger in that row, similar to Figure 2.
- Download button ( ) - sends the WNLZIP license file from the website to a PC.
- Table Page Tools - below the table are tools to manage many licenses across multiple tables.

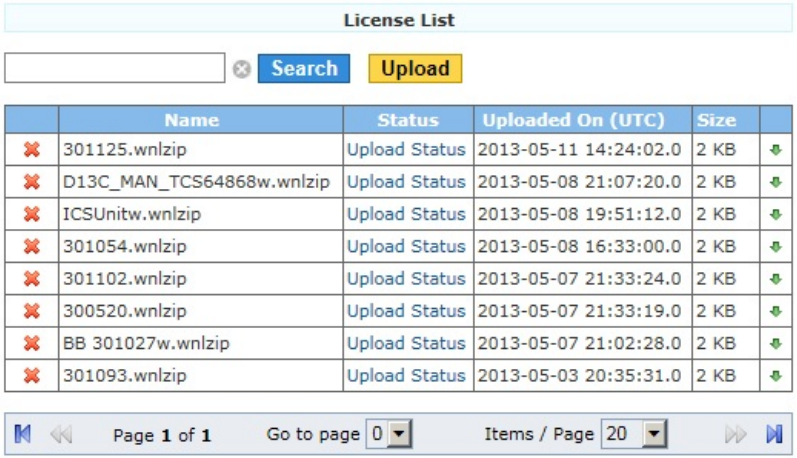

Figure 1: Manage / Site / License shows all logger licenses and allows new ones to be added to the website.

Figure 2: In the License List, click "Upload Status" to see a logger's license expiration date.

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Last Update: Sunday, May 12, 2013

Wireless Link Speed and Data Usage

Although neoVI PLASMA in wireless mode is quite amazing, wireless link speed (and possibly your bandwidth usage cost) needs to be considered. Data processing time and usage costs can increase quickly when trying to apply multiple large databases to huge buffers of data coming from multiple, fast networks blasting messages periodically at all times.

Relative Speeds

The fastest connections on neoVI PLASMA for moving large amounts of data around are its "hardwired" ethernet and USB ports.

The fastest wireless link supported by neoVI PLASMA is currently WIFI.

The next fastest wireless link is 3G cellular (GSM). neoVI PLASMA does not support faster 4G cellular technology yet, but it will at some point.

It Can Pay to Think Small

While there is certainly a need at times to "grab everything" there can be a price to pay for doing it that way all the time. On the other hand, there is also a risk of thinking TOO small or being too crafty and missing the data you needed to collect to solve a problem. So do not go overboard with these considerations.

When circumstances allow, try to reduce the amount of data you use in order to save you time and possibly money. Here are a few thought starters to help:

- Databases - skip using databases entirely if raw data is good enough. If decoded data is needed maybe keep the databases on your PC and not include them with the VS3ZIP scripts. If decoded data is needed on the website, then try to only include databases in the VS3ZIP scripts that will apply to that data set and not other databases.
- Filters - use filters to collect only the data you need. For example, if you only care about one ECU that communicates on one vehicle network, you might consider filtering only for that ECU/network combination. Even using just a network filter alone can be a HUGE data reducer on today's multiple network vehicles.
- Triggers - use trigger logic to start and stop data collection around the point of interest.

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Last Update: Tuesday, January 29, 2013

WirelessNeoVI Application (WN APK)

WirelessNeoVI is an Android application from Intrepid Control Systems that lets neoVI PLASMA operate in wireless mode. This application can also change settings, view statistics, and troubleshoot wireless related issues.

WirelessNeoVI automatically starts in the background after power is applied to neoVI PLASMA. The application's main screen can be opened from the neoVI PLASMA home screen (Figure 1) by tapping on its icon.

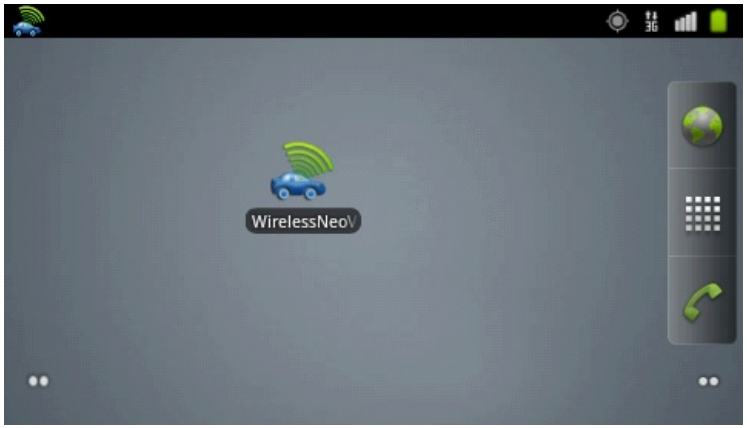

Figure 1: Tap the WirelessNeoVI icon on the neoVI PLASMA home screen to access it.

Main Screen (Figure 2 and Table 1)

Tapping the WirelessNeoVI icon in Figure 1 will open the main screen in Figure 2. In the upper left corner of Figure 2 is a status bar icon indicating the status of the WN APK service and server. Just below the status bar, the screen shows if the SERVICE is currently enabled or disabled.

Note: The SERVICE is not the same as the SERVER and both are required for successful wireless operations.

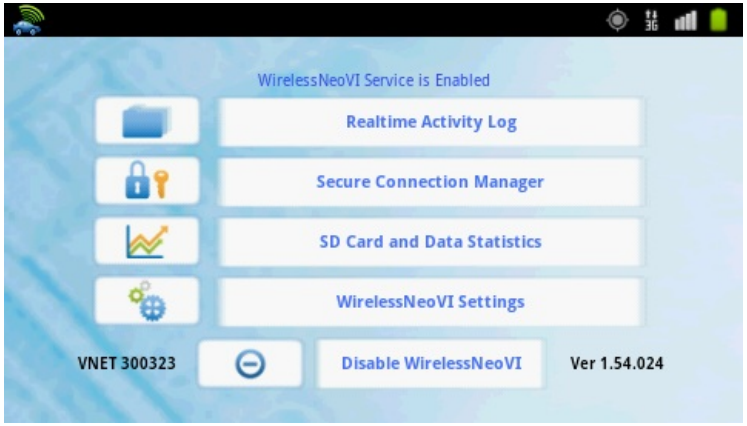

Figure 2: The WirelessNeoVI application main screen.

Table 1: WirelessNeoVI Main Screen Selections

Main Screen Selection	Description
Realtime Activity Log	View a realtime log of WirelessNeoVI activity and server traffic.
Secure Connection Manager	Keep server communications secure with this.
SD Card and Data Statistics	Shows SD card and data upload event statistics.
WirelessNeoVI Settings	Settings affecting all aspects of wireless mode operations.
Disable WirelessNeoVI	Disables/enables the WirelessNeoVI service.

Main Screen Menu Button ≡ (Figure 3 and Table 2)

Press the off-screen ≡ menu button to see the selections along the bottom of Figure 3 and described in Table 2.

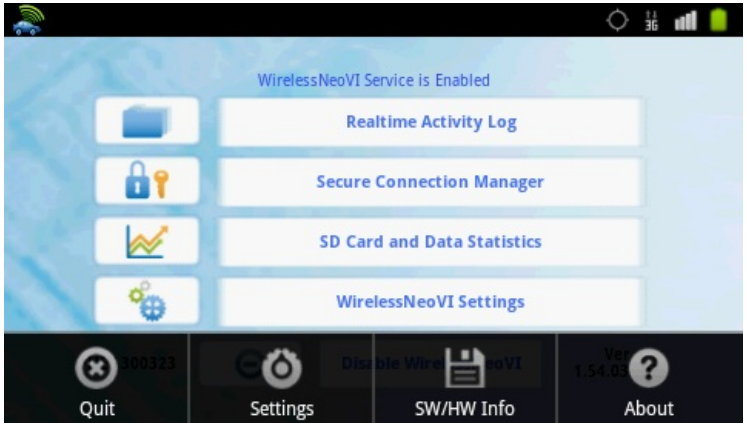

Figure 3: Press the off-screen menu button to see these selections while on the main screen.

Table 2: WirelessNeoVI Main Screen Menu Selections

Main Screen Menu Selection	Description
Quit	Closes the WirelessNeoVI screen, but leaves the app running in the background.
Settings	Settings affecting all aspects of wireless mode operations.
SW/HW Info	View neoVI PLASMA software and hardware information.
About	View release notes.

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Last Update: Thursday, February 07, 2013

WN App Menu: Quit

While on the WirelessNeoVI main screen, press the off-screen ≡ menu button and tap **Quit** to close the main screen.

"Quit" does NOT stop the WirelessNeoVI application from running!

After quitting, you will see the WirelessNeoVI status bar icon is still there which means the application is still running.

To disable WirelessNeoVI you must open it and tap on the Disable WirelessNeoVI button at the bottom of the main screen.

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Last Update: Wednesday, January 16, 2013

WN App Menu: SW/HW Info

While on the WirelessNeoVI main screen, press the off-screen ≡ menu button and tap **SW/HW Info** to see information similar to Figure 1.

Tap on the View Logger SD Card Info button to see SD card statistics.

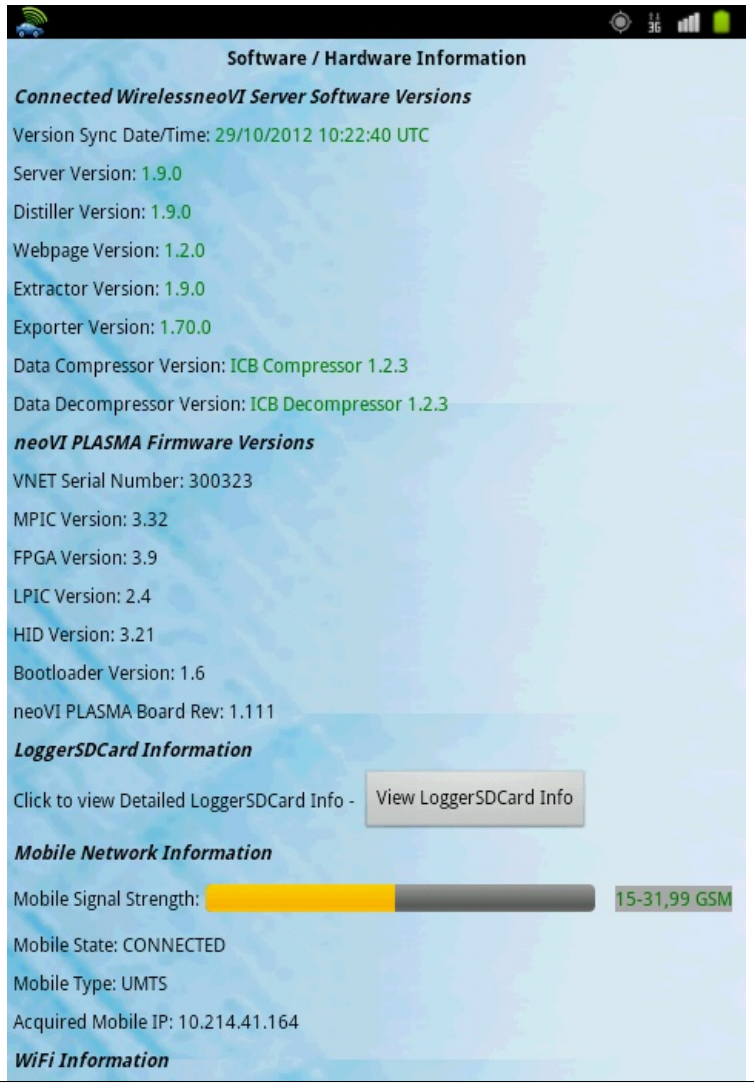

Figure 1: Use the off-screen menu button on the main screen to see this SW/HW Info.

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Last Update: Tuesday, January 29, 2013

WN App Menu: About

While on the WirelessNeoVI main screen, press the off-screen menu button and tap **About** to see release notes similar to Figure 1.

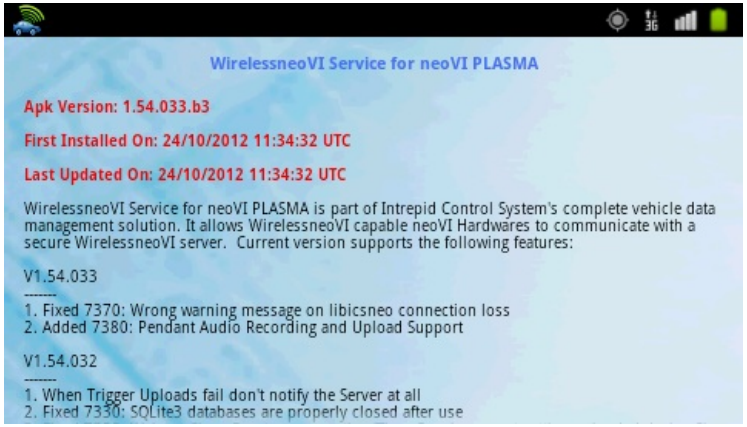
WirelessneoVI Service for neoVI PLASMA
Apk Version: 1.54.033.b3
First Installed On: 24/10/2012 11:34:32 UTC
Last Updated On: 24/10/2012 11:34:32 UTC
WirelessneoVI Service for neoVI PLASMA is part of Intrepid Control System's complete vehicle data management solution. It allows WirelessneoVI capable neoVI Hardwares to communicate with a secure WirelessneoVI server. Current version supports the following features:
V1.54.033
1. Fixed 7370: Wrong warning message on libicsneo connection loss
2. Added 7380: Pendant Audio Recording and Upload Support
V1.54.032
1. When Trigger Uploads fail don't notify the Server at all
2. Fixed 7330: SQLite3 databases are properly closed after use

Figure 1: Use the off-screen menu button on the main screen to see version information.

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Last Update: Tuesday, January 29, 2013

WN App: Realtime Activity Log

The Realtime Activity Log is one of the selections on the main screen of WirelessNeoVI. This screen shows a realtime log of WirelessNeoVI activity and server traffic as shown in Figure 1.

At the top of the screen is critical information about the **Server Connection**. The server must be ONLINE for wireless mode to work. If WirelessNeoVI was recently updated and the server connection is now always offline, the WirelessNeoVI Server Connection settings should be checked for errors.

At the bottom of the activity log screen are these simple controls:

- **Clear Log** - immediately erases the activity log.
- **View Error/General Log** - toggles between the general and error log views.

Figure 1: The Realtime Activity Log is opened from the main screen.

Some activity log settings are located in Miscellaneous WirelessNeoVI Settings.

Realtime Activity Log Menu Button ≡ (Figure 2 and Table 1)

Press the off-screen ≡ menu button to see the selections along the bottom of Figure 2 and described in Table 1.

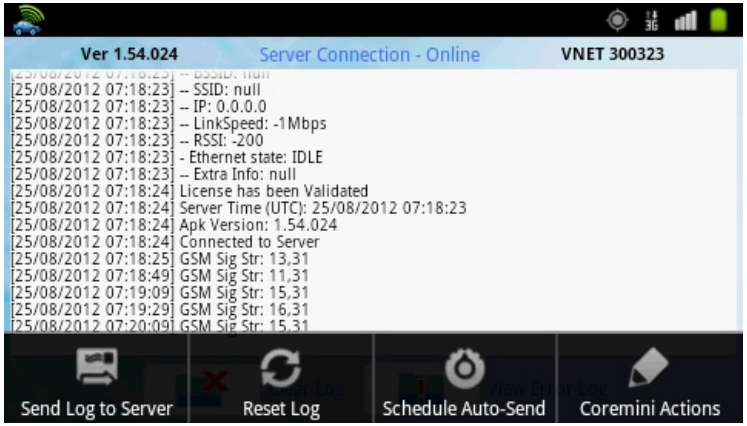

Figure 2: Press the off-screen menu button to see the selections along the bottom.

Table 1: Realtime Activity Log Menu Selections

Realtime Activity Log Menu Selection	Description
Send Log to Server	Asks if you wish to send a general or error activity log to the Wireless NeoVI website. Just tap on a selection to archive it on the server for future reference.
Reset Log	Immediately erases the activity log in neoVI PLASMA. (Warning: no prompt!)
Schedule Auto-Send	Opens a setup dialog for automatically sending realtime activity logs to the server.
CoreMini Actions	Displays buttons for manually controlling a VS3ZIP script in neoVI PLASMA.

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Last Update: Sunday, May 5, 2013

Realtime Activity Log Menu: Schedule Auto-Send

While on the Realtime Activity Log screen, press the off-screen ≡ menu button and tap on **Schedule Auto-Send** to see a setup dialog similar to Figure 1.

Realtime activity logs can be sent manually to the server, but this scheduler can save you the hassle by making neoVI PLASMA do it for you instead. Just setup the rules on the dialog, tap on **Save** at the bottom, and neoVI PLASMA will send activity logs to the website server archive accordingly.

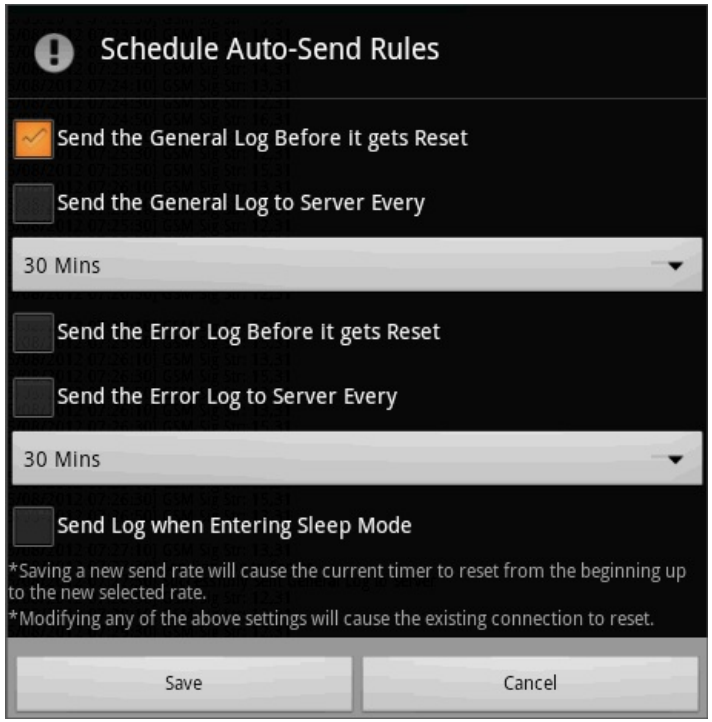
Schedule Auto-Send Rules
Send the General Log Before it gets Reset
Send the General Log to Server Every
30 Mins
Send the Error Log Before it gets Reset
Send the Error Log to Server Every
30 Mins
Send Log when Entering Sleep Mode
*Saving a new send rate will cause the current timer to reset from the beginning up to the new selected rate.
*Modifying any of the above settings will cause the existing connection to reset.
Save
Cancel

Figure 1: Use this scheduler to automatically send activity logs to the website archive.

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Last Update: Tuesday, January 29, 2013

Realtime Activity Log: CoreMini Actions

While on the Realtime Activity Log screen, press the off-screen ≡ menu button and tap on **CoreMini Actions** to see the controls shown in Figure 1 and described in Table 1.

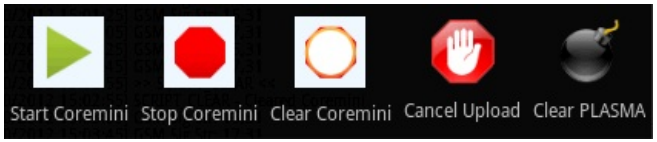

Figure 1: Use CoreMini Actions to directly control VS3ZIP scripts in neoVI PLASMA.

"CoreMini" is the program inside neoVI PLASMA that runs VS3ZIP script files. These CoreMini Action buttons let you manually control that program.

The controls are similar to the Wireless NeoVI website CoreMini Commands.

Table 1: Realtime Activity Log: CoreMini Actions

Command	Description
Start CoreMini	Starts the script currently in the device.
Stop CoreMini	Stops the script running in the device.
Clear CoreMini	Clears the script from the device.
Cancel Upload	Cancels the upload of any data log file to the website server currently in progress.
Clear PLASMA	Stops and clears the script in the device, cancels all data log file uploads, and resets the server connection.

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Last Update: Tuesday, January 29, 2013

WN App: Secure Connection Manager

Tapping on the Secure Connection Manager on the WirelessNeoVI main screen opens the screen in Figure 1. The top of the screen indicates if your server connection is secure. If it is not secure, try tapping on the **Update Security** button at the bottom to get an update.

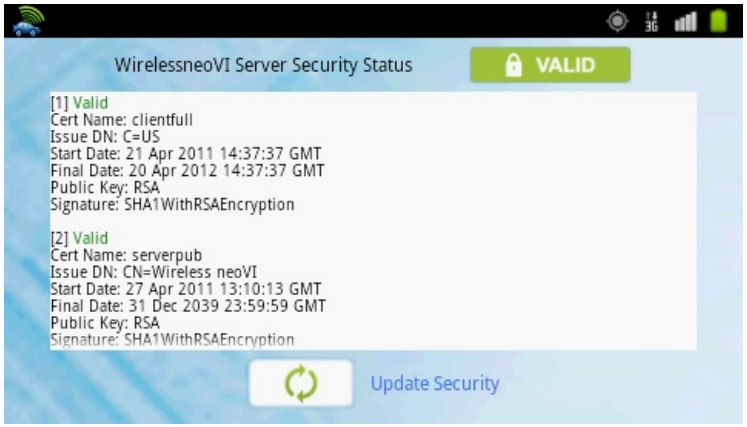

Figure 1: This example shows a secure wireless server connection.

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Last Update: Tuesday, January 29, 2013

WN App: SD Card and Data Statistics

Tapping on **SD Card and Data Statistics** on the WirelessNeoVI main screen opens the screen in Figure 1. This screen lets you see the SD Card Stats and the Upload Event Stats.

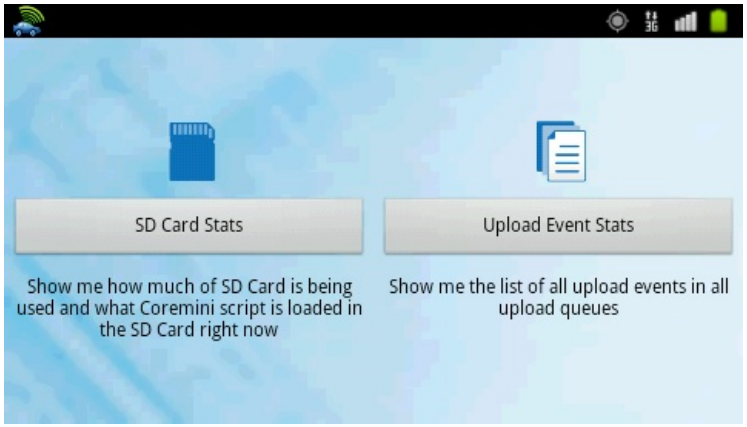
SD Card Stats
Upload Event Stats
Show me how much of SD Card is being used and what Coremini script is loaded in the SD Card right now
Show me the list of all upload events in all upload queues

Figure 1: Use this screen to see information about the SD card and data upload events.

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Last Update: Monday, April 22, 2013

WN App: SD Card Stats

SD Card Stats is one of the selections on the SD Card and Data Statistics screen in WirelessNeoVI. Opening SD Card Stats shows the following main screen sections similar to Figure 1:

SD Card Stats (Figure 1)

- Logger SD Card State - Indicates if the "top slot" SD card is inserted or not, which is SD Card #1 in the device layout.
- Logger SD Card Usage - This area shows information for SD card #1 in neoVI PLASMA.
- CoreMini in Logger SD Card - Tap on the View CoreMini Info button to see many statistics about the CoreMini VS3ZIP script currently loaded on SD Card #1.
- Local File System Usage - This area contains information about a third SD card which is internal to neoVI PLASMA.

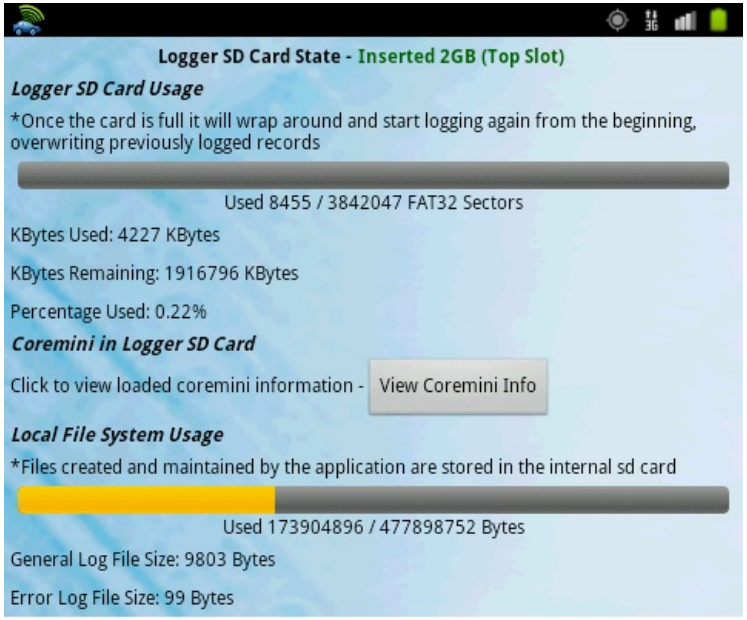
Logger SD Card State - Inserted 2GB (Top Slot)
Logger SD Card Usage
*Once the card is full it will wrap around and start logging again from the beginning, overwriting previously logged records
Used 8455 / 3842047 FAT32 Sectors
KBytes Used: 4227 KBytes
KBytes Remaining: 1916796 KBytes
Percentage Used: 0.22%
Coremini in Logger SD Card
Click to view loaded coremini information -
View Coremini Info
Local File System Usage
*Files created and maintained by the application are stored in the internal sd card
Used 173904896 / 477898752 Bytes
General Log File Size: 9803 Bytes
Error Log File Size: 99 Bytes

Figure 1: An example of various SD card statistics in neoVI PLASMA.

SD Card Stats Menu Button ≡ (Figure 2)

Press the off-screen ≡ menu button to see the selections along the bottom of Figure 2 which are described further below.

Logger SD Card State - Inserted 2GB (Top Slot)
Logger SD Card Usage
*Once the card is full it will wrap around and start logging again from the beginning, overwriting previously logged records
Used 8645 / 3842047 FAT32 Sectors
KBytes Used: 4322 KBytes
KBytes Remaining: 1916701 KBytes
Percentage Used: 0.23%
Reset API Connections
Clear Coremini from Card
Settings

Figure 2: Press the off-screen menu button to see these selections along the bottom.

Reset API Connections (Figure 3)

This option resets the software connections to the hardware and SD Card. This should not be needed for normal operation.

Figure 3: You can reset API for the neoVI PLASMA VNET or SD Card #1.

Clear CoreMini From Card (Figure 4)

This will erase the currently loaded VS3ZIP script file in neoVI PLASMA.

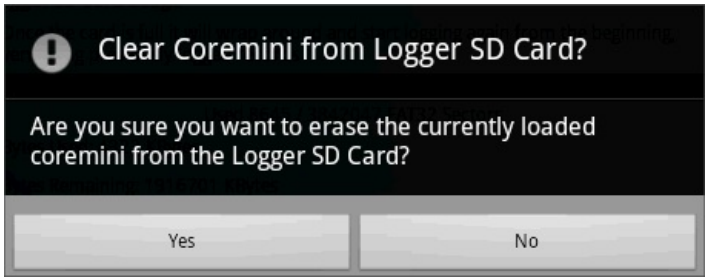
Clear Coremini from Logger SD Card?
Are you sure you want to erase the currently loaded coremini from the Logger SD Card?
Yes
No

Figure 4: Tap on yes if you really want to erase the currently loaded VS3ZIP script.

Settings (Figure 5)

This slider determines how often the SD Card Stats screen is updated.

Figure 5: This slider is a menu button option on the SD Card Stats screen.

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SD Card Stats: View CoreMini Info

While on the WirelessNeoVI SD Card Stats screen tap on **View CoreMini Info** to see information similar to Figure 1.

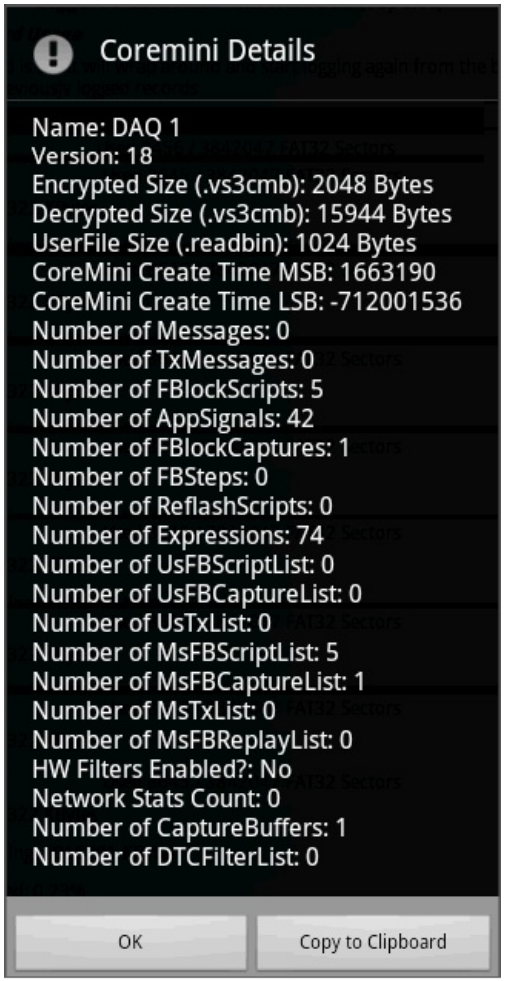

Figure 1: Use the SD Card Stats screen to get to all of this CoreMini Info.

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Last Update: Tuesday, January 29, 2013

WN App: Upload Event Stats

Upload Event Stats is one of the selections on the SD Card and Data Statistics screen in WirelessNeoVI. Tapping on that selection shows a screen similar to Figure 1.

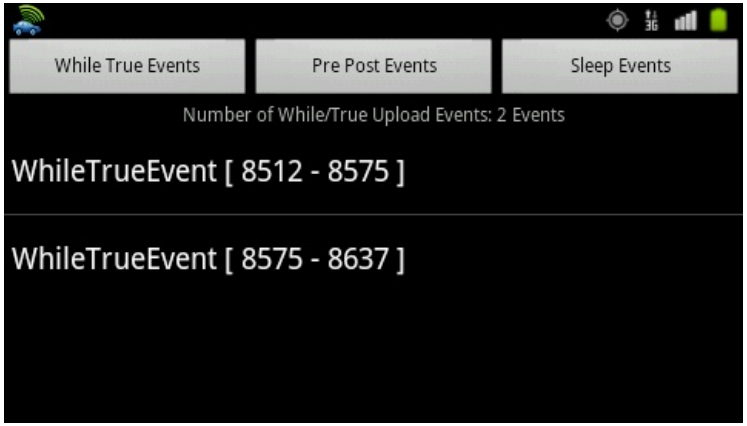
While True Events
Pre Post Events
Sleep Events
Number of While/True Upload Events: 2 Events
WhileTrueEvent [8512 - 8575]
WhileTrueEvent [8575 - 8637]

Figure 1: This screen has stats for data log upload events to the Wireless NeoVI website.

This screen keeps track of all automatic data upload events triggered by neoVI PLASMA to the Wireless NeoVI website.

Automatic Data Log Upload Methods

When making a VS3ZIP script, the VehicleScape Standalone Logging options support three methods to make neoVI PLASMA automatically upload its data log files to the Wireless NeoVI website server. Table 1 shows which settings in Standalone Logging are required for each method being tracked.

Table 1: neoVI PLASMA Automatic Data Log Upload Methods

Event	Standalone Logging Settings in Vehicle Spy
While True Events	• Collection Start Option = When Expression is True AND • neoVI PLASMA Collection Upload = enabled (uploads each collection after it finishes)
	• Collection Start Option = Using Trigger

Pre Post Events	AND • Collection Configuration = Pre/Post Collection AND • neoVI PLASMA Collection Upload = enabled (uploads each collection after it finishes)
Sleep Events	• Power Management < > Never (one of the sleep modes must be active) AND • neoVI PLASMA before sleep upload all data = enabled (uploads all collections before going to sleep)

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WN App: WirelessNeoVI Settings

Tapping on **WirelessNeoVI Settings** on the WirelessNeoVI main screen, opens to the first settings tab. This tab is called **Server Connection** and is shown in Figure 1. Four tabs in total hold the settings affecting all aspects of wireless mode operations. Use the links in Table 1 to for more information on the settings each tab has.

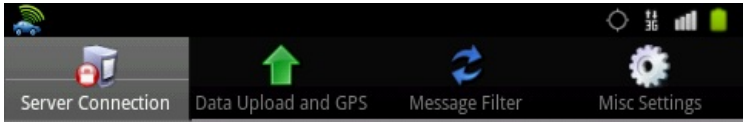

Figure 1: WirelessNeoVI has many settings to control its operation.

Table 1: WirelessNeoVI Settings Tabs

Settings Tab	Description
Server Connection (opens to this tab)	Settings for the Wireless NeoVI website server IP address and port number.
Data Upload and GPS	Change how data uploads work and how often GPS updates information.
Message Filter	Pre-built message filters to reduce data uploads.
Miscellaneous Settings	Application thread controls and realtime activity log settings.

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WirelessNeoVI Settings: Server Connection

Tap on WirelessNeoVI Settings on the WirelessNeoVI main screen to get to the Server Connection screen similar to Figure 1.

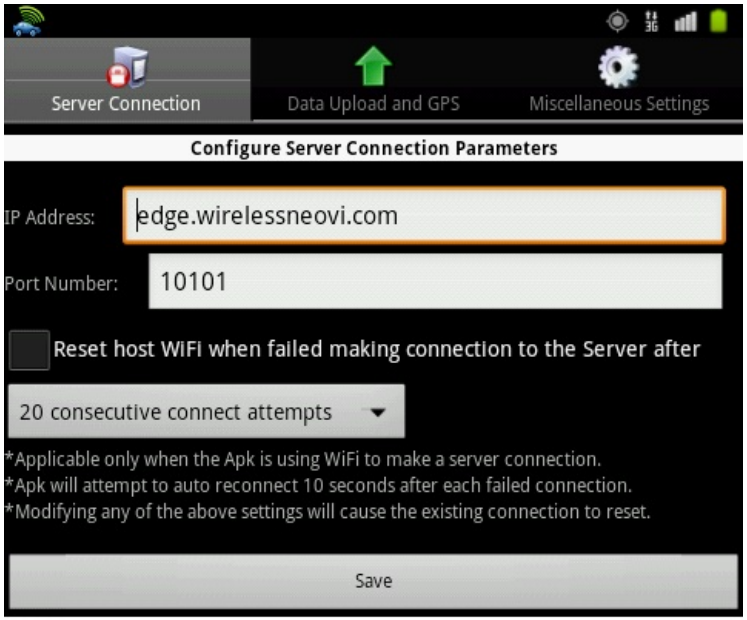
Server Connection
Data Upload and GPS
Miscellaneous Settings
Configure Server Connection Parameters
IP Address:
edge.wirelessneovi.com
Port Number:
10101
Reset host WIFI when failed making connection to the Server after
20 consecutive connect attempts
*Applicable only when the Apk is using WiFi to make a server connection.
*Apk will attempt to auto reconnect 10 seconds after each failed connection.
*Modifying any of the above settings will cause the existing connection to reset.
Save

Figure 1: These are the WirelessNeoVI Server Connection settings.

The **IP Address** and **Port Number** must be correct for neoVI PLASMA to work in wireless mode. Your WirelessNeoVI website administrator should know what these settings should be set to. The current server online/offline status is at the very top of the WirelessNeoVI Realtime Activity Log.

If you have a finicky WIFI connection there is a setting here to change the connect attempts.

Do not forget to tap the **Save** button at the bottom of the screen.

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WirelessNeoVI Settings: Data Upload and GPS

Tap on WirelessNeoVI Settings on the WirelessNeoVI main screen then tap on the Data Upload and GPS tab to get to the screen similar to Figure 1.

Do not forget to tap the **Save** button after making any changes here! It is at the very bottom of the screen and can be easy to miss if you do not scroll down to find it.

Configure Data Upload Parameters

This area in Figure 1 gives the option to track data. Clicking Show Upload Events keeps track of all automatic data upload events triggered by neoVI PLASMA to the Wireless NeoVI website. (Data log uploads can be manual using the website or automatic using the VS3ZIP script.)

Configure GPS Post Parameters

This area in Figure 1 controls how often neoVI PLASMA will send GPS position updates to the website server.

Configure Live Data

This area controls how long neoVI PLASMA will send Live Data to the Wireless NeoVI website.

Configure Audio Recording (Pendant)

This area at the bottom of Figure 1 controls audio recordings from a pendant.

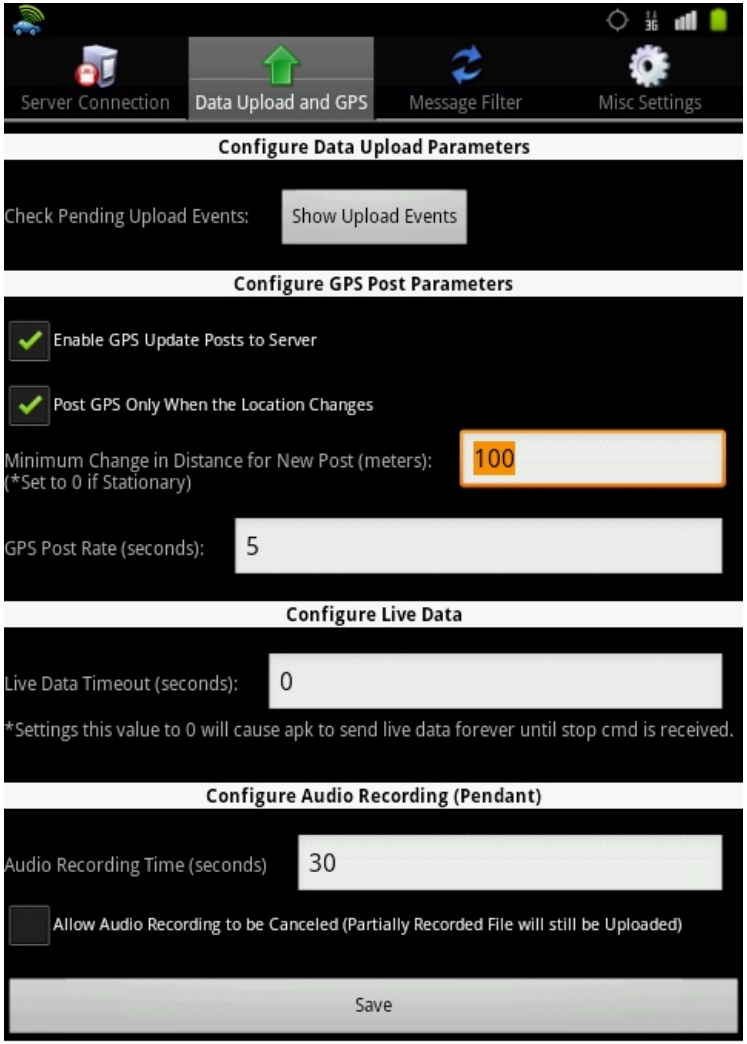
Server Connection
Data Upload and GPS
Message Filter
Misc Settings
Configure Data Upload Parameters
Check Pending Upload Events:
Show Upload Events
Configure GPS Post Parameters
Enable GPS Update Posts to Server
Post GPS Only When the Location Changes
Minimum Change in Distance for New Post (meters):
(*Set to 0 if Stationary)
100
GPS Post Rate (seconds):
5
Configure Live Data
Live Data Timeout (seconds):
0
*Settings this value to 0 will cause apk to send live data forever until stop cmd is received.
Configure Audio Recording (Pendant)
Audio Recording Time (seconds)
30
Allow Audio Recording to be Canceled (Partially Recorded File will still be Uploaded)
Save

Figure 1: WirelessNeoVI Data Upload and GPS settings.

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Last Update: Tuesday, January 29, 2013

WirelessNeoVI Settings: Message Filter

Tap on WirelessNeoVI Settings on the WirelessNeoVI main screen to get to the Message Filter screen similar to Figure 1.

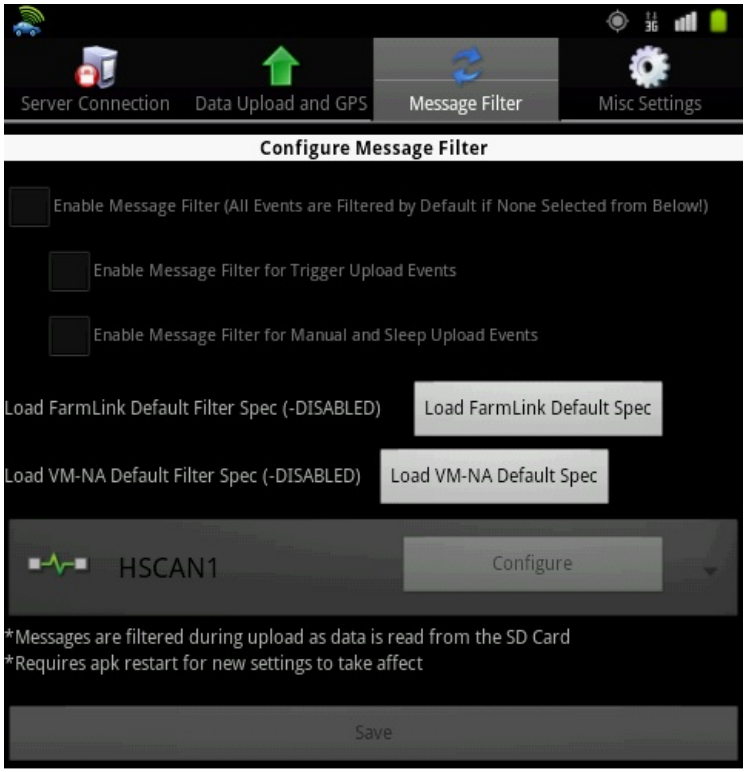
Server Connection
Data Upload and GPS
Message Filter
Misc Settings
Configure Message Filter
Enable Message Filter (All Events are Filtered by Default if None Selected from Below!)
Enable Message Filter for Trigger Upload Events
Enable Message Filter for Manual and Sleep Upload Events
Load FarmLink Default Filter Spec (-DISABLED)
Load FarmLink Default Spec
Load VM-NA Default Filter Spec (-DISABLED)
Load VM-NA Default Spec
HSCAN1
Configure
*Messages are filtered during upload as data is read from the SD Card
*Requires apk restart for new settings to take affect
Save

Figure 1: These are the WirelessNeoVI Message Filter settings.

Most settings here are disabled for now, but there are some pre-built filters for specific customers of Intrepid Control Systems.

Farmlink

When uploading, exclude any upload that only contains neoVI network msgs (GPS-only file).

VM-NA (VM Motori North America)

When uploading, periodically filter CCP traffic on MSCAN to reduce the amount of data to be uploaded before sleep.

1. No HSCAN1/2 messages on manual or automatic uploads before sleep.
2. Only upload MSCAN ArbIDs $360, $389, and $3A0 with full cycle sampled every 200 ms.

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Last Update: Tuesday, January 29, 2013

WN App: Miscellaneous Settings

Tap on WirelessNeoVI Settings on the WirelessNeoVI main screen then tap on the Miscellaneous Settings tab to get to the screen similar to Figure 1.

Do not forget to tap the **Save** button after making any changes here! It is at the very bottom of the screen and can be easy to miss if you do not scroll down to find it.

Configure Main Service Settings
Controls for WirelessNeoVI threads and notification of job results. It is HIGHLY recommended to not change these settings.

Configure Main Activity Settings
Changes how WirelessNeoVI indicates activities.

Configure Activity Log Settings
These settings affect how the Realtime Activity Log operates.

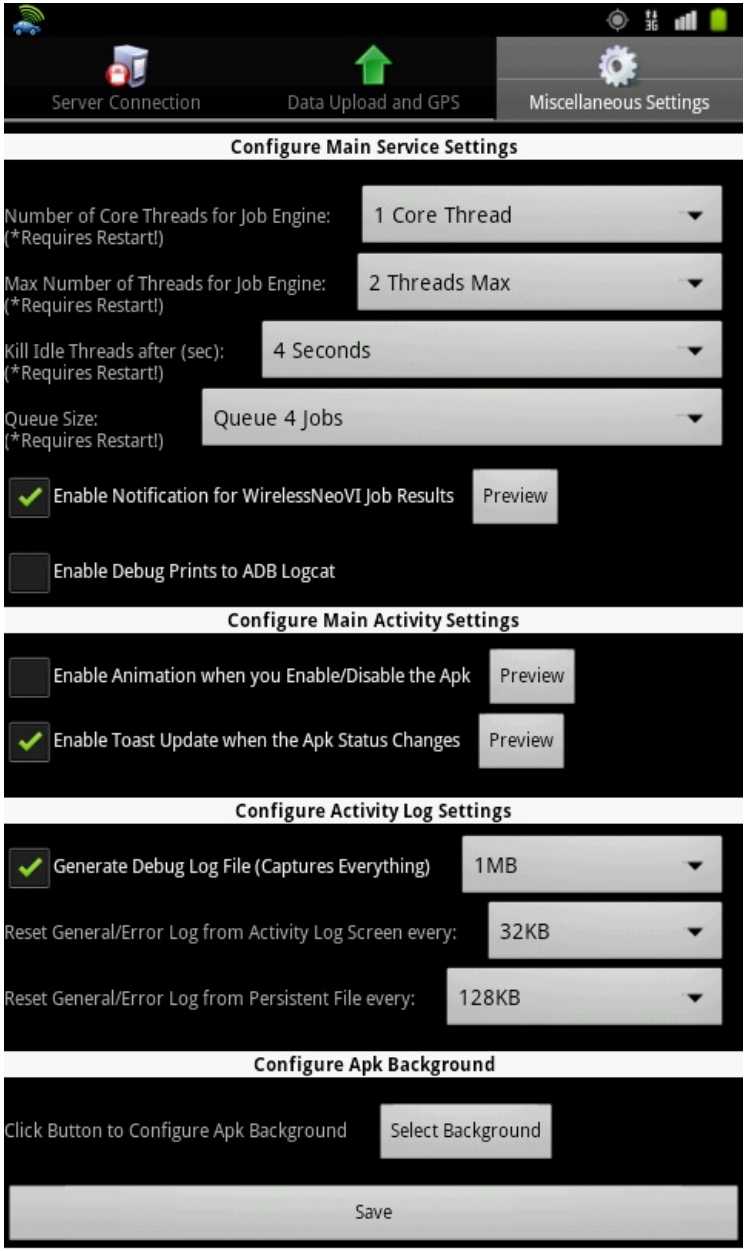

Figure 1: These are the WirelessNeoVI Miscellaneous settings.

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Last Update: Wednesday, February 06, 2013

WN App: Disable

The bottom of the WirelessNeoVI main screen has a **Disable/Enable WirelessNeoVI** button shown in Figure 1. That button is the only quick way to disable the application.

Even when disabled, the WirelessNeoVI status bar icon will continue to show the application is still running because it is only disabled, not stopped.* The top of the WirelessNeoVI main screen has text showing if the service is currently enabled or disabled.

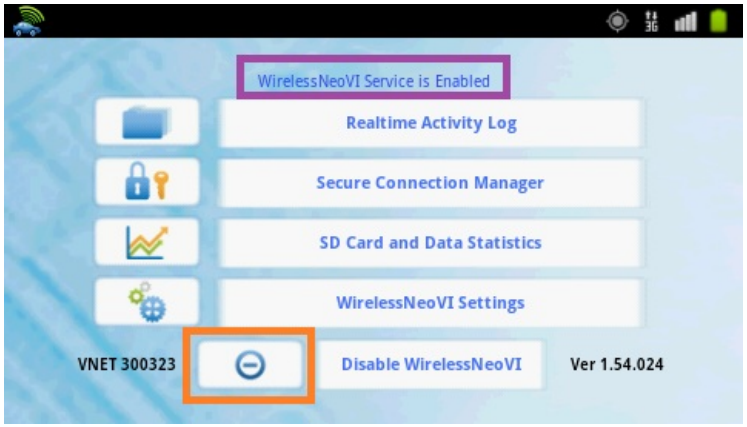

Figure 1: Tap on the disable button at the bottom of the main screen to disable WirelessNeoVI.

Why Disable WirelessNeoVI?

Disabling WirelessNeoVI is optional for PC mode, but can be a good idea to clearly establish control over neoVI PLASMA. It can be very confusing to use your PC to send a VS3ZIP script to the hardware and moments later see it was cleared by somebody far away using the Wireless NeoVI website!

Some Related Side Notes

Note #1 - Cycling neoVI PLASMA power will restart AND re-enable WirelessNeoVI.

Note #2 - Using Quit by pressing the off-screen menu button on the WirelessNeoVI main screen does NOT stop the WirelessNeoVI application from running! That selection only closes the WirelessNeoVI main screen.

*Note #3 - To completely stop WirelessNeoVI (during this power cycle only) you must use this Android setting:

Home / Menu / Manage Apps / Downloaded / WirelessNeoVI / Force Stop

Cycling neoVI PLASMA power will restart WirelessNeoVI unless you use that same Android settings area to Uninstall WirelessNeoVI, which is NOT recommended! (neoVI PLASMA is a wireless device after all)

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Last Update: Sunday, May 5, 2013

neoVI PLASMA in PC Mode with Vehicle Spy

A PC running Vehicle Spy can work directly with a neoVI PLASMA, just like a neoVI **FIRE**.

How To Get neoVI PLASMA Into PC Mode With Vehicle Spy

First, on neoVI PLASMA:

1. Verify an SD card is installed.
2. Connect the FIRE VNET on the bottom to DC power and vehicle data bus networks.
3. Connect the USB to PC port on top to the PC.
4. Disable the WirelessNeoVI application at the bottom of its main screen. (optional)

Next, on the PC:

5. Open Vehicle Spy and it will show a VNET inside neoVI PLASMA is ready to go.

Please refer to the help documentation within Vehicle Spy (Figure 1: ① and ②) for tutorials, examples, and details regarding features not described in this guide. The Vehicle Spy help documentation can also be found online by clicking here.

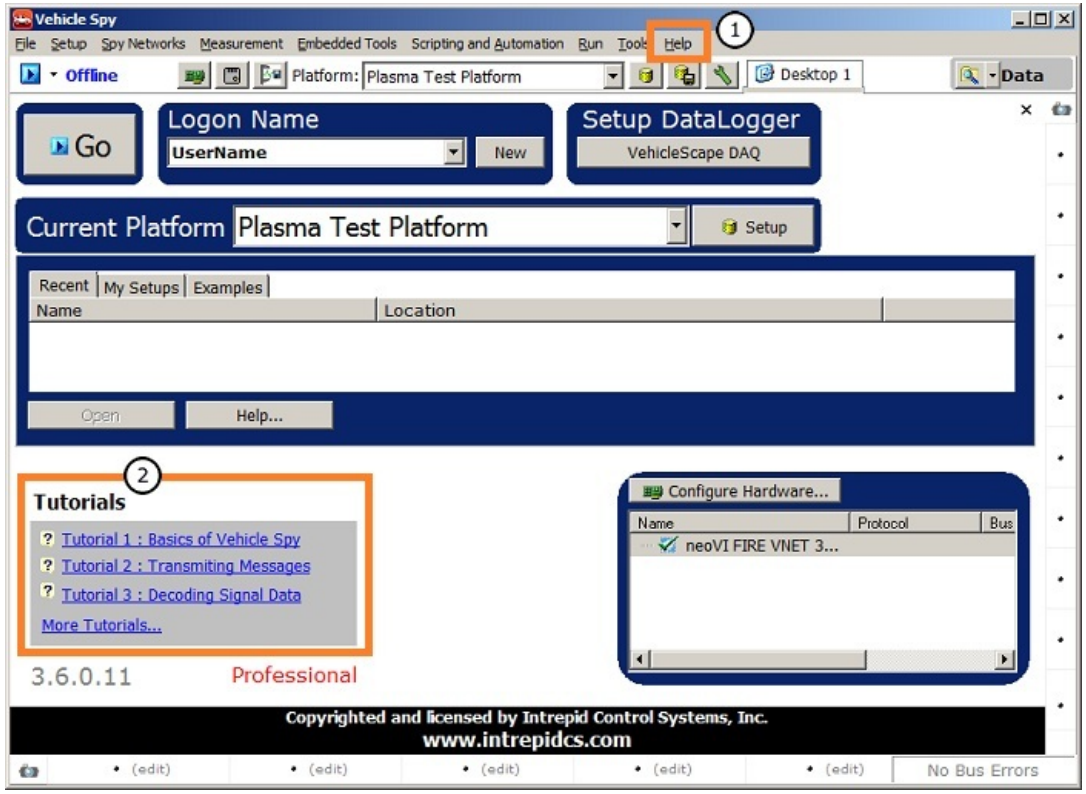

Figure 1: Please see the Vehicle Spy help files for many important features not presented in this guide.

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For More Help

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neoVI PLASMA hardware

http://intrepidcs.com/neoviplasma/index.html

Wireless NeoVI website
http://www.wirelessneovi.com/

Vehicle Spy software
http://intrepidcs.com/VehicleSpy/index.html

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